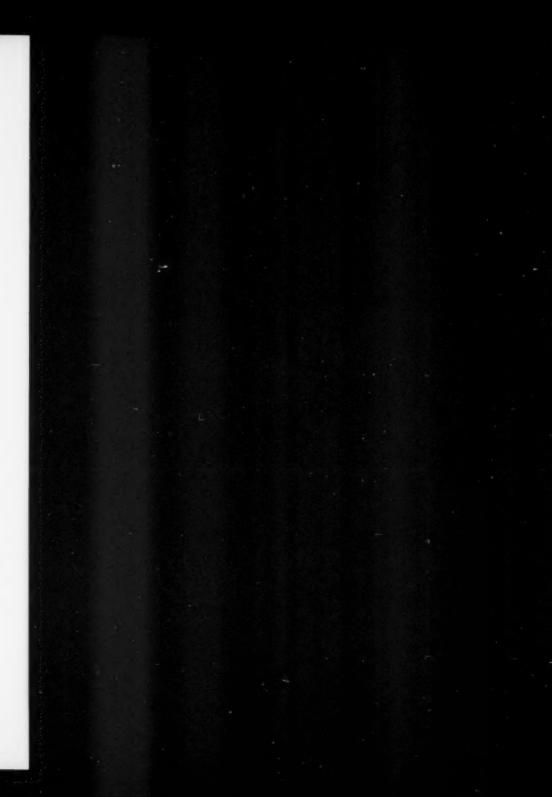
CONTENTS

FRONTISPIECE-Norman Davidson	xii
MY CAREER IN MOLECULAR BIOLOGY, Norman Davidson	xiii
FRONTISPIECE-Thressa Campbell Stadtman	xxvi
Discoveries of Vitamin B_{12} and Selenium Enzymes, Thressa Campbell Stadtman	1
ERROR-PRONE REPAIR DNA POLYMERASES IN PROKARYOTES AND EUKARYOTES, Myron F. Goodman	17
LONG-DISTANCE ELECTRON TRANSFER THROUGH DNA, Bernd Giese	51
THE BACTERIAL RECA PROTEIN AND THE RECOMBINATIONAL DNA REPAIR OF STALLED REPLICATION FORKS, Shelley L. Lusetti and Michael M. Cox	71
V(D)J RECOMBINATION: RAG PROTEINS, REPAIR FACTORS, AND REGULATION, Martin Gellert	101
EUKARYOTIC DNA POLYMERASES, Ulrich Hübscher, Giovanni Maga, and Silvio Spadari	133
EUKARYOTIC RIBONUCLEASE P: A PLURALITY OF RIBONUCLEOPROTEIN ENZYMES, Shaohua Xiao, Felicia Scott, Carol A. Fierke, and David R. Engelke	165
ACTIVE SITE TIGHTNESS AND SUBSTRATE FIT IN DNA REPLICATION, Eric T. Kool	191
GREAT METALLOCLUSTERS IN ENZYMOLOGY, Douglas C. Rees	221
ATP-Dependent Nucleosome Remodeling, Peter B. Becker and Wolfram Hörz	247
BIOLOGICAL ROLES OF PROTEASES IN PARASITIC PROTOZOA, Michael Klemba and Daniel E. Goldberg	275
METABOLISM AND THE CONTROL OF CIRCADIAN RHYTHMS, Jared Rutter, Martin Reick, and Steven L. McKnight	307
DNA REPLICATION IN EUKARYOTIC CELLS, Stephen P. Bell and Anindya Dutta	333
THE LA PROTEIN, Sandra L. Wolin and Tommy Cedervall	375
LIPOPROTEIN RECEPTORS IN THE NERVOUS SYSTEM, Joachim Herz and Hans H. Bock	405

Order Out of Chaos: Assembly of Ligand Binding Sites in Heparan Sulfate, <i>Jeffrey D. Esko and Scott B. Selleck</i>	435
Neuronal ${\rm Ca}^{2+}/{\rm Calmodulin}$ -Dependent Protein Kinase II: The Role of Structure and Autoregulation in Cellular Function,	
Andy Hudmon and Howard Schulman	473
BIOCHEMISTRY OF NA, K-ATPASE, Jack H. Kaplan	511
MAMMALIAN ABC TRANSPORTERS IN HEALTH AND DISEASE, P. Borst and R. Oude Elferink	537
HOMOGENEOUS GLYCOPEPTIDES AND GLYCOPROTEINS FOR BIOLOGICAL INVESTIGATION, Michael J. Grogan, Matthew R. Pratt, Lisa A. Marcaurelle, and Carolyn R. Bertozzi	593
	373
LIPOPOLYSACCHARIDE ENDOTOXINS, Christian R. H. Raetz and Chris Whitfield	635
FORMATION OF UNUSUAL SUGARS: MECHANISTIC STUDIES AND BIOSYNTHETIC APPLICATIONS, Xuemei M. He and Hung-wen Liu	701
NUCLEAR ACTIN AND ACTIN-RELATED PROTEINS IN CHROMATIN REMODELING, Ivan A. Olave, Samara L. Reck-Peterson, and Gerald R. Crabtree	755
MECHANISMS OF FAST PROTEIN FOLDING, Jeffrey K. Myers and Terrence G. Oas	783
RNA EDITING BY ADENOSINE DEAMINASES THAT ACT ON RNA, Brenda L. Bass	817
CATALYTIC PROFICIENCY: THE UNUSUAL CASE OF OMP DECARBOXYLASE, Brian G. Miller and Richard Wolfenden	847
CATALYTIC STRATEGIES OF THE HEPATITIS DELTA VIRUS RIBOZYMES, <i>I-hung Shih and Michael D. Been</i>	887
Indexes	
Author Index	919
Subject Index .	995
Cumulative Index of Contributing Authors, Volumes 67–71	1035
Cumulative Index of Chapter Titles, Volumes 67–71	1039

ERRATA

An online log of corrections to *Annual Review of Biochemistry* chapters may be found at http://biochem.annualreviews.org/errata.shtml





AUTHOR INDEX

A

Aakalu G. 499 Aalfs JD, 249 Aaronson SA, 421 Aasland R, 254 Abbate M, 412 Abbott MA, 498 Abdel-Aziz W, 141 Abdillahi F, 652 Abe K, 531 Abe M, 311, 316 Abecassis M, 579 Abeijon C, 445, 456 Abeles RH, 11 Abell KWY, 860 Abelson J, 179 Abeygunawardana C, 800 Abinun M, 121 Abitiu N, 663 Abkevich VI, 804 Aboussekhra A, 145, 148 Abruzzo LV, 555, 556 Acheson SA, 864, 870, 876 Achsel T, 388, 389 Ackerman MS, 800 Ackermann U. 530 Adachi T. 558 Adachi Y, 346 Adam C, 313 Adamidi C, 166, 173, 175 Adams C, 32, 35, 157 Adams CC, 767 Adams JH, 279, 837 Adams MD, 381, 407, 413, 594 Adams MWW, 233-35 Adams PD, 363

Addis MF, 297

Adler B, 653

Adman ET, 200

Aderem A, 636, 639, 641

Advani R, 552 Adzuma K, 79, 84, 114 Aebersold R. 35 Aebi M, 612, 614, 678 Affara N. 9 Agalioti T, 266, 267 Agey MW, 295 Aggarwal AK, 20, 154 Agnew BJ, 774 Agnihotri G, 705, 707, 711, 720, 722, 731 Agrawal A, 114, 116, 117, 119 Agrawal PK, 449 Aguilar LK, 107 Aguirrezabalaga I, 730 Ahern SM, 415 Ahlert J, 705, 738, 746 Ahmed CMI, xxi Ahn J, 446 Ahringer J, 257 Aida K, 653 Aida R, 314, 316 Aigner S, 378, 381, 383, 389, 390 Aihara H, 85 Aikawa J, 451, 452, 456, 457 Aikawa M, 278, 279, 284 Aimoto S, 609, 625 Aitken KM, 479 Ajito K, 703 Akamatsu Y, 119 Akashi S, 639 Akiyama H, 413 Akiyama M, 312, 314, 316 Akizuki M, 377 Akke M, 793 Albers RW, 496 Albert D, 578 Alberts BM, 41, 74, 134 Alborn AM, 426

Albracht SPJ, 233, 235 Albrecht L, 309, 310 Albrecht U, 309, 312, 317 Alderete JF, 291, 297 Aleixo MD, 452, 456 Alekseyev Y, 208 Alexander C, 639, 641 Alexander DC, 675 Alexander J, 293 Alexander PS, 199 Alexander SI, 554 Alexandre D, 107 Alexandrescu AT, 800 Alexiadis V, 250, 257, 355 Alexopoulou L, 639 Alfken J, 821 al-Hendy A, 674, 682 Ali N. 384, 392, 397 Alias ER, 422 Alifano P, 168 Alin K, 761, 773 Allain N, 562 Allary M, 280 Allaway D, 657 Allen AG, 662, 684 Allen BL, 146, 440 Allen G, 315 Allen JD, 548, 555, 556, 561, 562 Allen JR, 243, 600 Alley J, 151 Allikmets R, 538, 544, 555-57, 565, 570, 571 Allingham JS, 118 Allis CD, 248, 266, 267, 764 Allison GE, 687 Allmang C, 181, 376, 377, 384, 386, 387, 394 Alm EJ, 797, 800, 802, 807 Almeida R, 448 Almo S, 756 Almquist KC, 547, 558

Alon T. 774 Alper PB, 703 Al-Shawi MK, 546, 548 Alspaugh MA, 376, 377 Alt FW, 103, 107, 121, 122, 125, 126 Altenbach C, 529 Altermatt HJ, 551 Altman E, 659, 670 Altman S, 166-68, 171-73, 175-81, 183 Alvarado L, 282 Alvarez FJ, 861 Alvarez M, 553, 554 Alvarez-Sanchez ME, 297 Alves LC, 288, 294, 295 Alzari PM, 278, 279 Amachi T, 547 Amacker M. 197 Amado M, 448 Amaldi F, 384, 393 Amalendra K, 150 Amano M, 771 Amar M, 572 Amaral DG, 423 Amaratunga M, 77 Amatucci AG, 121 Amaudrut J, 54-58 Amaya T, 861 Ambach A, 774 Ambros P, 253, 776 Ambudkar SV, 544, 547-49 Amemiya Y, 798 Amer AO, 678 Amler E, 531 Amor K. 659 Amor PA, 636, 664, 669, 675, 679, 683 Amoura Z, 572 Amram D, 776 Amyes TL, 860, 876 An Y-Q, 659 Ananthanarayanan M. 578

Ananyoranich S, 903

Ananyeva NM, 411

Anderko R. 524

Andersen C, 650

Andersen JP, 512, 523, 526, 531 Anderson CW, 122 Anderson DG, 92 Anderson J, 179, 377, 384, 385 Anderson JM, 415 Anderson KV, 639 Anderson LJ, 413 Anderson MS, 641, 642, 653 Anderson RF, 66 Anderson RG, 427 Andert K. 795 Andreotti AH, 596 Andrews NC, 376 Andrews NW, 280, 281, 286 Angelin-Duclos C, 125 Anger J-P, 562 Angerler J, 554 Angliker H, 284 Angove HC, 226, 228, 231 Angus-Hill ML, 252 Anhalt G, 377 Anjelkovic J, 146 Ankri S. 292 Anslyn EV, 890, 906 Antle MC, 315 Antoch MP, 308, 310 Antolovic R. 531 Anton ES, 417 Aoufouchi S, 35, 36, 39, 157 Aoyama T, 13 Aparicio JG, 340 Aparicio OM, 339, 341, 345, 353, 358, 365 Apicella MA, 657, 659, 671 Appelmelk BJ, 659, 671 Appleby TC, 865, 866, 869 Arad G, 21, 22-24 Aragnol D, 378, 381, 383 Arai K, 359, 362, 364 Arai M. 798, 799 Araki H, 145, 147, 148, 359, 360 Araki M, 153, 250, 257 Aratani Y, 151 Aravind L, 34, 35, 119, 341 Arber S. 774

Arca M. 420 Arceci RJ, 551, 553 Archer M, 460 Archer RH, 181 Archer TK, 163 Arendsen AF, 233, 238 Arenson TA, 25, 78, 85 Ares M Jr, 387, 837 Arezi B, 140 Argraves KM, 422 Argraves WS, 411, 422-25 Argüello J, 522, 523 Argüello JM, 523, 525 Arias IM, 576 Arigoni D, 7 Arking D, 671 Arkowitz RA, 11 Armores A, 460 Armstrong JA, 249, 253, 254 Armstrong SA, 410-12, 422 Arnberg AC, 544, 831 Arndt K. 113 Arnez J. 166 Arnold E, 211 Arnold HP, 554, 579 Arnould I, 557 Aromatorio D, 474 Aronowski J, 482, 487, 488 Arora S. 546 Arraiano CM, 168 Arrington CB, 790 Arroyo R, 290, 291, 297 Artault JC, 772 Artavanis-Tsakonas S, 769 Arthur LM, 124, 545 Aruscavage PJ, 820, 822, 829, 833, 834, 837 Asano M. 340, 355 Asano O, 641 Asano S, 362 Aschoff J, 310 Ashall F, 280, 284 Ashby GA, 231 Ashcom JD, 411, 417, 423 Ashcroft SJH, 477 Ashford RSI, 669 Ashikari S, 444, 456

Askari A, 519, 531 Askari JA, 444 Askew GR, 514 Aslund L, 286 Assaraf YG, 539, 548, 561, 563 Assem M, 578 Astatke M, 199 Asuncion FJ, 483 Asuncion M, 736 Asuru A, 387, 388 Atamna H, 285 Atkinson PW, 116 Atkisson DL, 662 Atrain S, 709 Attardi G, 171 Atwood DW, 562 Aubry F, 257 Auld VJ, xx, xxi Austin RJ, 337, 338, 340, 349 Austin TJ, 864 Auta J, 416 Auty R, 250 Avery BJ, 407, 414, 421 Avila-Gonzalez L, 291, 297 Axel R, 835 Axelrod B, 224 Axelsen KB, 513, 514 Axley MJ, 11 Ayala R, 420 Ayata M, 823 Ayran JC, 200 Ayukawa K, 377, 378, 381, 393 Ayyagari R, 146 Azarian SM, 570, 571 Azzaroli F, 563, 577 B

Baack BR, 286 Baack M, 339, 340, 353 Baas F, 566 Babcock HP, 910 Babinet C, 775, 776 Babinski KJ, 642, 651 Babior BM, 725 Bacchelli B, 567 Bach ME, 425 Bachi A, 388, 389 Bachinsky DR, 412 Bachmann M, 376, 378, 391 Backen AC, 453, 454, 463 Backes BJ, 287, 611 Bäckström G, 454, 455, 457 Bacskai BJ, 423, 425 Baczko K, 823, 831 Bader B, 628 Bader CO, 414 Bading H, 773 Baeg GH, 461 Baekelandt M, 552 Baenziger JU, 615 Baeschlin DK, 626 Bafico A, 421 Bagley KA, 233, 235 Bahar I, 795, 803 Bahmanyar S, 866 Bahr V, 295 Bai CY, 376, 381 Bai GH, 289 Bai XM, 444-46, 448, 450, 451, 453-56, 459 Bai Y, 790-92, 799, 800 Baier G, 424 Bailey MJ, 661, 663 Bailey SN, 106, 238 Bailin T, 119 Bailly E, 284, 285 Bailone A. 21, 22, 27, 29, Bain LJ, 549, 564, 565 Bainbridge B, 643, 644 Bainton DF, 286, 287 Baker A, 150 Baker D, 785, 796, 797, 800, 802, 806, 807 Baker SJ, 647 Baker TA, 23, 134, 561 Bakker CTM, 557 Bakker MAH, 453

Bakos E, 547, 557

Balasubramaniam S, 317

Balasubramanian N, 578

Balaban RS, 12

Baldacci G, 140 Baldwin JE, 705 Baldwin RL, 784, 790, 791. 796, 799, 800, 806, 808 Baliga R, 79 Ball WJ, 514 Ballard J, 761, 775 Ballard RE, 376 Ballatori N, 560 Ballestar E, 126, 257 Ballew RM, 787 Ballou DP, 712, 714, 715 Balsalobre A, 310, 311, 315-17 Balsara BB, 565 Baltimore D, 105, 110, 111, 116, 121, 125 Baltz RH, 728, 733, 740 Bamberg E, 512, 522 Bamburg JR, 774 Bame KJ, 446, 450-52, 457 Ban N, 908 Banaszak LJ, 717 Bandarian V, 712, 714, 715, 725 Bandtlow CE, 436 Bandziulis RJ, 378 Banerjee A, 671 Banerjee D, 282, 285 Banerjee R, 282, 283, 298 Banerjee SK, 24 Banfie H, 771 Bangs JD, 297 Bann JG, 484 Banu L, 10 Bar I, 413 Barak ZA, 732, 733 Barale JC, 278, 279 Baranes D, 498 Barbayannis FA, 774 Barber GA, 707 Barbeyron T, 454 Barbour AG, 652 Barchi JJ, 596 Barclay GR, 659 Bard AJ, 227 Bardelmeijer HA, 551

Barden JA, 483

Bardgett ME, 560 Bar-Ilan A, 732 Barker HA. 7 Barker N. 264 Barnabei O, 771 Barnard M. 309 Barnes DE, 122 Barnes H, 427 Barnes KM, 554 Barnett JD, 340 Bar-Noy S, 13 Baron B, 38 Baron C, 9, 10, 12 Bar-Peled M. 456 Barr K, 675, 682 Barra J, 775, 776 Barrault C, 280 Barrett AJ, 276 Barrett P, 313 Barry G, 823, 828, 829, 835 Barry J, 41 Barry JD, 293 Barsky D, 209 Bart G, 293, 294 Barta A, 908 Bartek J, 351, 354, 363, 364 Bartel DP, 901, 902 Barth CF, 107 Bartkiewicz M, 167, 172, 173 Bartlett PA, 652, 852, 882 Bartley LE, 910 Barton JK, 52, 54, 56, 61-63, 68 Barton WA, 735 Bartz QR, 723 Barwick JL, 579 Bar-Ziv R. 77 Basham D, 283 Bashirullah A, 499 Basilio C, 819 Basom R, 265 Basrai MA, 256 BASS BL, 817-46; 818-25, 828, 830-37, 841, 843 Bassing CH, 126 Bastin DA, 679, 687 Basu S, 899

Batchelor RA, 679 Bechthold AF-W, 705, 707, Bate N, 720, 728 Bates PA, 293 Bates SE, 553-56 Batta AK, 422 Battey F, 417 Battista JR, 21, 22, 83 Batzer AG, 414 Bauer A. 628 Bauer G. 141 Bauer Jy 628 Bauer ME, 661 Bauer MS, 325 Baum M. 172 Bausch S, xxi Baxevanis AD, 168, 256 Baxter M. 109, 124 Baybayan P, 460 Bayer KU, 477, 487, 499-501, 503 Bayer ME, 688 Bayfield MA, 908 Bazan JF, 639 Bazemore LR, 78, 85 Bazett-Jones DP, 259, 260, 262 Beach D, 344 Beachy PA, 421, 422 Beak P, 862, 863, 865 Beal PA, 835, 841 Beall EL, 337 Beaman TW, 641 Beamish HJ, 121 Bear DG, 75, 78, 86 Beard WA, 200, 210, 213, 215 Bearden DW. 741 Beardsley GP, 201 Bearne SL, 876, 878, 880 Beatty W. 283 Beaulieu S, 554 Beavis R, 282 Bebenek K, 20, 31-36, 38, 39, 144, 153-55, 158, 198-200, 215 Bebout BM, 227 Becerril-Garcia C, 291, 297 Becherel OJ, 43

711, 712, 741, 746 Beck AK, 151 Beck K. 230 BECKER PB, 247-73; 163, 248-50, 254, 255, 257, 258, 261, 262, 266, 355, 758, 767 Beckingham K, 479 Bedale W, 24 Bedale WA, 90 Beddington RSP, 446, 460, 463 Bedford DJ, 712, 722 Bedinger P, 41 Bednarski JJ, 643, 648 Beebe JA, 170, 890, 899 Beek SJ, 758-61 Beeler DL, 446, 455, 458 BEEN MD, 887-917, 6, 888, 890-92, 894-96, 898, 901, 902, 904, 905, 910 Beemik HTH, 74 Beese LS, 211 Beggah AT, 519, 525 Beggs JD, 388, 389 Begley T, 865, 866, 869 Begley TP, 866 Behre E, 417 Beigelman L, 901, 903 Beijnen JH, 549-52, 554, 556, 558-60, 563, 564 Beil UF, 573 Beinert H, 225, 226, 240 Beisiegel U. 411 Beketic-Oreskovic L, 553 Belinsky MG, 557, 563-66 Bell DW, 565 Bell JB, 861-64, 870 BELL SP, 333-74; 134, 141, 249, 334, 336-41, 345-49, 351, 353, 355, 358, 365, 367 Bell WL, 827 Bellaiche Y, 446, 450, 460, 462 Bellone C. 501

Bello-Reuss E, 553 Bellosta S. 425 Belmont JW, 107 Belotserkovskaya R, 248 Beisham GJ, 379, 381, 391-93, 397 Belting M, 448 Belunis CJ, 643, 655 Belval BJ, 443 Bemark M, 32 Benaim E, 554 Bender CF, 123 Bender ML, 860 Bender W, xviii Bendtsen L, 411 Benedict RC, 85, 88 Bengtsson M, 623 Bengtsson-Olivecrona G, Benhayon D, 417, 418 Benight AS, 77 Beniya H, 253 Benkovic PA, 208 Benkovic SJ, 208 Benne R, 818 Bennett B, 234 Bennett JL, 181 Bennett MK, 475, 477, 498, 500 Bennett RL, 415 Bennett-Guerrero E, 659 Bennion BC, 852, 882 Benoist C, 107 Bensimon A, 368 Bentley RC, 378 Benton PMC, 232 Benzer S, 309 Beratan DN, 54 Berek C, 37, 38 Beretta B, 309 Berg JM, 222, 225 Berg P, 85, 86 Berge KE, 573 Bergen AA, 567 Berger A, 276 Berger JM, 342-44 Berger SL, 248

Bergles DE, 319

4

41,

8.

Bergman LW, 355 Bergmann C, 426, 427 Bergström T, 443 Berks BC, 239, 240 Berlin JR, 523, 525 Berlin YA, 56, 57 Berman HM, 223 Bermudes D, 643 Bermudez V, 140, 141 Bernad A, 156, 158 Bernard A, 827 Bernard F, 279, 280 Bernard GR, 639, 641 Bernat A, 440 Bernatchez S, 672 Bernfield M, 436, 437, 439, 444, 448, 449 Bernhard WA, 66 Berninsone P, 452, 461 Bernstein NK, 283, 284 Bernstine EG, 151 Berr F, 568 Berridge G, 547 Berridge MJ, 497 Berry C, 283, 284, 299 Berry MJ, 10, 596 Bertini I, 222 Bertocci B, 35, 36, 39, 40, 103, 157 Bertorello AM, 512 BERTOZZI CR, 593-634; 595, 598, 605; 608, 611, 621, 630 Bertram JG, 22, 24, 25, 27, 75 Bertrand E, 179, 183, 390 Besmer E, 107, 111, 118 Besson S, 239-41 Betoulle MEM, 279 Bettaïeb A, 553 Betts L, 838-40 Betz AG, 37 Betz BL, 776 Betz UAK, 39, 155 Beuchle D, 257 Beushausen S, 481

Beutler B, 636, 641, 642

Beveridge DL, 703

Beverley SM, 461 Bevilacqua PC, 895, 899, 901, 902, 904, 905, 907, 910 Beyreuther K, 426, 427 Bezanilla F, 522, 529, 823, 828, 835 Bezombes C, 553 Bezryadin A, 68 Bhagat B, 475 Bhagat S, 547 Bhalla US, 496 Bhandoola A, 123, 124 Bhardwaj G, 557 Bhasin A, 116 Bhat TN, 223 Bhat UR, 653 Bi B, 74 Bianco PR, 87 Bibb MJ, 712 Bibi E, 549 Bidnenko V, 72, 74, 93 Biederer C, 572 Biegel JA, 253 Bielinsky AK, 334, 337 Bienz M, 264 Biernat J, 420 Biggar SR, 251, 764 Biggerstaff M, 145, 148 Biggins JB, 705, 735, 746 Biland A, 54 Bill RM, 623 Billeter MA, 830, 831 Billoud B, 233 Binari RC, 445, 461 Bindels RJ, 562 Binder DA, 641 Binder S, 412 Bindls RJM, 565 Bingham JB, 759 Birch DG, 570, 571 Bird AP, 65, 257, 758 Bird LE, 80 Birkmann A, 9, 758, 763 Birney E, 379 Bischoff J, 444 Bishop CN, 308 Bishop DK, 80

Bishop RE, 644, 648 Biswas R, 166, 176, 177 Bittar P. 320 Bittner M, 665, 666 Bixon M, 54, 55 Bjerling P. 256 Bjork I, 286 Bjork-Eriksson T, 426 Bjorkhem I, 573 Black ME, 838 Blackburn EH, 149 Blackburn NT, 685 Blacker D, 424 Blacklow SC, 407, 414 Blackman MJ, 278, 279 Blackwell TK, 125 Bladl AR, 123 Blaikie P. 414 Blaiklock P, 444, 455 Blanchard D, 39 Blanchard JS, 641, 864, 869 Blanchard SG, 578 Blanchoin L, 756 Blanco G, 512, 514, 519, 523, 525, 741, 746 Blanco L, 32, 36, 156, 158 Blank TA, 258 Blankenfeldt W. 736 Blanks JE, 602 Blattner FR, 639 Blau J, 310 Blaylock BA, 6 Bledsoe RK, 578 Bleicher KB, 554 Blenis J, 419 Blisnick T, 278, 279 Bliss JM, 683, 688 Blitzblau H. 337 Blobel G, 377, 379, 383 Bloch CA, 639 Block GD, 313, 314, 318 Blom-Roosemalen MCM. Bloom LB, 145, 198, 201, 210 Blostein R, 512, 514, 518,

526, 531

Blow JJ, 335, 336, 339, 341, 345, 347, 348, 350, 351, 353-55, 361-64, 366 Blumberg B, 579 Blumenthal AB, 355 Blumenthal R, 771 Blundell TL, 439 Blunt T, 121 Bochar DA, 253, 255 Bocher V., 578 Böck A, 9, 10, 12 BOCK HH, 405-34 Bock K, 600, 619, 657, 671 Bodenhagen DF, 147 Bodzioch M, 572 Boelens WC, 377, 384, 389 Boerbooms AM, 377 Bogenhagen DF, 36, 37, 149, 391 Bogue MA, 114, 121 Bohm GA, 720, 722, 737 Bohm T, 342, 351, 356 Böhme M, 561 Bohonos N. 723 Bohr VA, 150 Boice JA, 789 Bois-Joyeux B, 318, 326 Bolhuis H, 545, 547 Bolin JT, 224, 228 Bollum FJ, 157 Bommarito S, 201, 202, 214 Bonagura CA, 241 Bond BJ, xviii Bond TD, 538, 541 BonDurant RH, 297 Bonfa E, 377 Bonifaci N. 379 Bonneau R, 785 Bonner CA, 23, 28, 29 Bonner WM, 123 Bonneville M, 107 Bonte E, 249, 250, 255, 257, 355, 758 Bonte EJ, 250, 254, 258, 758, 767 Bonvento G, 319 Boon C, 123

Boosalis MS, 201 Boothroyd C, 320, 323, 324 Bootsma AH, 562 Bopp D, 397 Borden A, 24 Bordier C, 295 Bordonne R, 388 Borer RA, 378 Borg JP, 411, 414, 415, 421, 425, 427 Borges A, 732 Borgnia MJ, 539 Borisova S, 724, 725 Borisova SA, 738 Bork JM, 29, 77, 78, 85, 92 Bork P. 414 Borst J, 554 BORST P, 537-92; 544, 548, 550-54, 560-68, 570, 650 Bosch I, 553 Bosco G, 340 Bosma MJ, 106, 109, 121, 122 Bosma PJ, 557, 568 Botchan MR, 336-38 Bothwell ALM, 168 Botstein D, 352, 358 Böttcher A, 572 Bottoms JD, 444 Boubnov NV, 105 Boudreault AA, 252, 758, 759, 763 Boudsocg F, 20, 27, 29 Bouille G. 705 Boulton SJ, 123 Bouras C, 320 Bourdon MA, 447 Bourin MC, 440 Bousfield GR, 615 Bousset K, 337, 341, 349, 362 Boute O, 569 Bouvier J. 295 Bowater RP, 122 Bower JM, 496 Bowman AB, 419 Bowman S, 283

Boxenbaum N, 518 Boyer JL, 563, 577 Boyer LA, 250, 260, 769 Bover PD, 348 Boyer SH, 703 Boyes J, 126 Boyington JC, 11 Boyl PP, 384, 393 Boyle JA, 376, 377, 388 Boyles JK, 413 Bozzi F. 118, 121 Braakman I, 614 Brabetz W, 636, 665, 667 Bracha R, 292 Bradbury EM, 121, 767 Brade H. 636, 639, 657, 659, 665, 667, 670, 676, 682, 683 Brade L, 659, 670, 682, 683 Bradfield CA, 309 Bradley G, 553 Brady MF, 552 Bragado-Nilsson E, 175, 388 Brahms H. 388, 389 Braiterman LT, 574 Braithwaite DK, 23, 32, 41, 135, 136, 153 Brajtburg J, 705 Brakenhoff JP, 818 Braman JC, 211 Bramhill D, 642 Braña AF, 736, 741, 746 Branch AD, 890 Brandenburg K, 652 Brandes C, 415, 427 Brandon C-I, 717 Brandsma RH, 572, 579 Brandt JM, 685 Brandtzaeg P, 639 Brangi M. 555, 556 Braswell EH, 398 Braun A, 249, 476, 503, 504, 758, 761 Braun AP, 476 Braun JR, 410, 412 Braun-Breton C, 279 Brautigam CA, 136, 138, 211

Bravo C, 892 Bray D, 678 Bray PG, 283 Breaker RR, 890, 900 Breazeale S, 647 Brecht WJ, 425 Bredel M, 550 Bredt D, 319 Breeden L, 764 Breen MA, 564, 565 Brehm A, 249, 250, 256-58, 261, 262, 265 Breimer DD, 550 Breman JG, 277 Brendel V. 74 Brennan J, 407, 414, 421 Brennan RG, 484, 549 Brenner SE, 241 Brenner SL, 78 Breslow R, 906 Bressan DA, 124 Bressler SL, 411, 415 Breton CB, 279, 450, 685. 745 Breuning M, 567 Brewer BH, 422 Brewer BJ, 362, 365, 366 Brewer HBJ, 573 Brickey D, 476 Brickey DA, 484, 485, 489 Briggs JB, 615 . Bright GM, 704 Brigle KE, 232 Brill WJ, 228 Brillinger G-U, 709 Brimer C, 550 Brindle J, 822 Brinen LS, 286, 288 Brinkhuis RF, 548, 555, 556. 561, 562 Brinkmann T, 444 Briolay A, 626 Briones MR, 289 Briscoe DM, 554 Brisson J, 662 Brisson JR, 659, 660, 670 Brittingham A, 295, 296 Brizuela BJ, 761, 774, 775

Brocchieri L, 74, 80 Brocke L. 477, 497-99 Brockman JP, 74 Brockmöller J, 554, 579 Brockwell DJ, 785 Broddefalk J, 623 Brody RS, 864, 874 Broedel SE, 787 Broekhuis C, 377, 378, 393 Broekhuis CH, 381, 396 Broers FJ, 377, 379, 381 Brokx RD, 485 Brom M. 577 Bromley SK, 626 Bronner D, 682, 683, 688 Bronson R. 420 Bronson RT, 420 Brook A, 775, 776 Brook TD, 703 Brooke JS, 665 Brooks CL 3rd, 785 Brooks DR, 293, 294 Brooks-Wilson A, 572 Brotcorne-Lannoye A, 31 Brotherus JR, 531 Brott BK, 421 Broughton BC, 33, 34, 43, 154 Brown BM, 795 Brown D. 283, 412 Brown DA, 568 Brown DD, 391 Brown E, 556 Brown G, 107, 118 Brown GW, 345, 351, 362, 364, 366 Brown JH, 499 Brown JR, 448, 456 Brown JW, 166, 167, 171, 173, 175, 176 Brown K, 239 Brown KE, 257 Brown KM, 903 Brown L, 336, 341 Brown MJ, 123, 124 Brown MK, 575 Brown MS, 406, 410-12, 417

Brown PC, 553 Brown PK, 679 Brown PO, 20, 114, 117, 250, 251, 253, 262, 264, 761, 768, 775 Brown RM, 668 Brown RS, 895, 900 Brown SA, 311, 316, 323, 324 Brown SD, 413 Browse J, 655 Broxterman HJ, 552, 561, 563 Broze GJ Jr. 411 Brozek KA, 643, 644, 653, 654, 657 Bruchhaus I, 291 Bruck I, 21, 24, 27, 40, 198 Brückner K. 594 Bruening G, 889, 891 Bruford E, 32 Bruix M, 791 Bruni CB, 168 Brunmark A, 614 Brunschwig K, 257 Brunstrom JE, 419 Brusa R, 826 Brusca EM, 178 Bryan SK, 29 Bryant FR, 83, 84, 90 Brzoska PM, 35 Bu G, 410 Bu GJ, 410, 411 Bu Z, 120 Bucciantini M, 800 Buchanan J, 54, 66 Buchholz U. 559 Büchler M. 561 Buchmeier S. 757 Bucholz U, 563 Buckle M, 837 Buckley AM, 356 Budde A, 255 Buddecke E, 449 Buechler JA, 483 Bueno A, 342, 351, 363 Buermeyer AB, 41 Buerstedde J-M, 125

Buff EM, 446, 462 Buisine E, 281 Bujo H, 414 Bulaj G, 795 Bulawa CE, 642, 644 Bulet P. 609 Bulger M, 254, 255, 257 Bulik DA, 445, 448, 462 Bull HS, 641, 642 Bull L, 569 Bull LN...569 Bulleit RF, 477 Bullock SL, 446, 453, 454, 460, 463 Bulone V, 668 Bulter AR, 720, 728 Bulter T. 735 Bultman S, 253, 776 Bunger MK, 308 Bunni MA, 563 Bunting KD, 554, 556 Bur D. 284 Burack WR, 626 Burant CF, 40 Burbee D. 446 Burch CL, 671 Burchell A, 474 Burchell B, 565 Burgdorf LT, 66 Burger M, 63 Burgers PMJ, 32, 140, 141, 145, 146, 156 Burgess BK, 227, 228, 231 Burgess K, 202 Burgess WH, 411, 423 Burgin AB, 176 Burgin KE, 477, 497, 498 Burin L, 56 Burk O, 554, 562, 579 Burkard U. 175 Burke DF, 439 Burke JM, 901, 903, 909 Burke SH, 501 Burke TG, 705 Burke TW, 340, 355 Burkhart R, 348 Burland V, 639 Burleigh BA, 280, 281

Burley SK, 343 Burnashev N, 823, 826, 827 Burnet PW, 828 Burns CM, 823, 827 Burns JL, 645, 653 Burns KD, 714, 715 Burns SM, 673 Burrows CJ, 52, 63, 64 Burrows LL, 662, 667, 670, 673, 675, 679, 685, 688 Burtis KC, 32 Burton RE, 789, 794, 803, 805, 806, 808 Busby RS, 789 Busch H, 376, 394 Busch SJ, 439 Buscher TC, 787 Bush AI, 411, 424 Bushar G, 777 Bustamante C, 29, 74, 95, 787 Bustin M. 111 Butcher EC, 608 Butenhof KJ, 596 Butler L, 146 Butler LD, 458 Butler PD, 672 Butterfoss GL, 872, 874, 879 Button LL, 295 Buzayan JM, 889, 891 Bycroft M, 835 Byford MF, 705 Byun S, 709 C

Cabantchik ZI, 298 Cabradilla CD, 376 Cabrito 1, 239 Cadet J, 63, 64 Cadigan KM, 775 Cadisch J, 684 Caffrey CR, 288 Cai H, 28, 31, 32, 199, 201 Cai JS, 145 Cai T, 181 Cai ZL, 66, 903 Cairns BR, 251, 252, 257-59, 261, 264, 758-60, 764, 766-69, 776 Cairns J, 28 Calafat J, 548, 560 Calame K, 125 Calandra P, 172 Caldecott K, 122 Calderone TL, 794, 803, 808 Caldwell K, 407, 414, 421 Caler EV, 280, 281 Callaghan R, 545, 547 Callebaut I, 119-21, 123 Callen DF, 566 Callender RH, 787, 800, 806 Calothy G, 823, 831 Calvo O, 179, 377, 384, 385 Calzada A, 342, 351, 363 Camacho F, 310 Camba R. 241 Camerini-Otero RD, 78, 79, 84 Cameron LM, 231 Cameron P, 642 Campanella C, 774 Campbell AS, 626, 628 Campbell CN, 68 Campbell FE, 391 Campbell JA, 668 Campbell JL, 141, 342, 363, 364 Campbell M, 27 Campbell MJ, 84 Campbell P, 454 Campetella O, 286 Campetella OE, 286

Carlson LM, 107, 125 . Carlson M, 758, 764, 766 Camphausen RT, 604 662, 671 Campling BG, 564 Carlstedt I, 449 Campobasso N, 228 Camus A, 775, 776 830, 831, 833 Canas B, 339, 349 Carmona E, 286 Candy JM, 732 Carneiro F, 448 Cane D, 705 Carney JP, 123, 124 Cane DE, 747 Caroff M, 662 Canfield VA, 514 Carotenuto R, 774 Cannon JF, 895, 900 Carpenter K, 54, 66 Cannon KS, 614 Carpenter PB, 336, 339, 341, Cano-Gauci DF, 460, 461 353

Cantley LC, 771 Canton H, 823, 827 Cao LG, 177, 181, 183 Cao XW, 425 Cao Y, 764 Cao ZX, 235 Capaldi AP, 791, 797 Capanni C, 800 Capco DG, 757 Capella MMA, 286 Caplan MJ, 512 Capobianco JO, 653 Cappuccinelli P, 297 Capra JD, 39 Capriglione T, 774 Capriotti C, 416 Caputi A, 501 Carafoli E, 474 Caran N, 501 Carbajo RJ, 736 Carballo PMS, 662 Card G. 238 Cardarelli CO, 548 Cardin AD, 439 Cardinali B, 384, 393 Carell T, 66, 67 Carlier MF, 773 Carlomagno MS, 168 Carlow D, 876 Carlow DC, 876, 878 Carlson BA, 385 Carlson DL, 334 Carlson KA, 253 Carlson RW, 653, 654, 657, Carmichael GG, 823, 824,

Carpenter R, 116 Carpenterdeyo L, 576 Carpick BW, 835 Carr AM, 360, 361 Carrara G, 172 Carraway KL, 595 Carrell TG, 242 Carreras CW, 705 Carrington T, xiv Carrion AM, 772 Carrion-Vazquez M, 787 Carrodeguas JA, 147 Carroll AM, 121, 122 Carroll CD, 284 Carruthers VB, 279 Carson CC, 399 Carson DR, 35 Carswell-Crumpton C, 29 Cartee RT, 684, 685 Carter CW Jr. 838 Carter K. 122 Carter KC, 819, 820, 835 Carter MS, 391 Carter P. 453 Carter R. 293, 294 Cartwright ME, 551, 554, 555 Carty SM, 643 Caruana DJ, 68 Caruccio N, 394 Caruthers MH, 899, 900 Casciano CN, 554 Casciola-Rosen LA, 377 Cascorbi I, 554 Casellas R, 107 Casey JL, 821, 823, 831, 832, 834, 836 Cash VL, 232 Casjens S, 652, 653 Cassard S, 107, 118 Cassiano L, 643 Cassone VM, 315 Cassuto E. 86 Castano IB, 32, 35, 157 Castle M, 264 Casu B. 439 Cattabeni F, 501 Cattaneo R, 823, 830, 831 Causgrove TP, 787, 800, 806 Cavagnero S, 808 Cavaignac S, 683 Cavazzana-Calvo M. 123 Cavieres JD, 531 Cazenave C, 77 Cazzulo JJ, 286 Ceccato ML, 440 Cech TR, 177, 890, 899, 903, 910 Cedar H. 125 CEDERVALL T. 375-403: 377, 381, 386, 394, 396 Cedzynski M, 659, 662, 670 Celander DW, 172, 178, 179 Celesia GG, 426, 427 Celniker SE, 381, 407, 413 Center M, 559 Cerami A. 282, 636 Ceriani MF, 309 Cerio M, 181 Cerosaletti KM, 123 Cerritelli ME, 27 Cerruti L, 554 Certa U. 284 Cerutti A, 32, 39, 40, 158 Cha A. 529 Chabbert M, 77 Chadalavada DM, 895, 899, 904 Chae T, 420 Chaganti RSK, 37, 38 Chahine J, 785 Chai WG, 453, 595 Chait BT, 251, 282, 758, 764, 766, 769

Chakravarti D, 309, 315 Chaleff DT, 766 Challberg MD, 339 Challet E, 321, 327 Chambenoit O, 572 Chamberlain JR, 166–70, 173, 175, 178, 179,

Chakrabarti P. 228

377, 384, 386, 395 Chambers I, 9 Chambers JC, 376, 378, 381 Chambon P, 257, 267 Chamow SM, 615 Chan CK, 786 Chan EKL, 378, 381, 396 Chan HSL, 553, 803, 804 Chan VJ, 293–95 Chandler S, 126 Chandra G, 578 Chandra NR, 80, 84 Chanez M, 318, 326 Chanfreau G, 376, 377, 384, 386, 387, 394, 837

Chang A, 639 Chang ACK, 639 Chang AM, 308, 309 Chang B, 476

Chang CWT, 710, 715 Chang DD, 181 Chang FL, 832 Chang G, 545, 546, 649,

650, 690 Chang KP, 296 Chang M-F, 890, 895, 898 Chang S, 356

Chang YN, 384, 395 Chang Z, 440 Changler DW, 391

Chao M, 831, 832 Chaperon AR, 626 Chapman L, 557

Chapman T, 910 Chapman WH Jr, 906

Chappell CL, 281 Chappell DA, 422

Chappell SA, 498 Chaput JC, 79

Charbonneau V, 626 Charnay Y, 320

Charnock SJ, 668, 685 Charon M-H, 235

Charton G, 827 Chase JA, 85 Chardburi B, 236, 237

Chaudhuri B, 336, 337, 339, 341, 353 Chaudhuri G, 295

Chaudhuri J, 121 Chaudhuri NC, 195, 214 Chauvet S, 378, 381, 383 Chaves I, 309 Chavez F, 193 Chavkin C, xxi

Chawla S, 773 Chazin WJ, 703

Che L, 24 Chedin F, 77

Chen CX, 819, 820, 835

Chen DJ, 121, 183 Chen DQ, 296

Chen DS, 832 Chen EY, 460

Chen G, 296, 553, 725

Chen G-Q, 562 Chen H, 29 Chen HH, 363

Chen HT, 123, 124 Chen HW, 720, 722, 728, 731–33

Chen HY, 35

Chen JJ, 363, 411, 415, 578, 594

Chen JL, 166, 175, 177, 339, 343, 354, 363 Chen JS, 233, 234

Chen KS, 241 Chen P-J, 832, 890 Chen RL, 450 Chen SC, 416

Chen SC, 416 Chen T, 340 Chen W, 38

Chen X, 144, 253, 262, 264, 761, 768

Chen XL, 198, 199 Chen XMH, 710, 715, 720,

722 Chen X-T, 598, 600, 609 Chen XW, 295, 794

Chen XX, 225, 241 Chen XY, 725

Chen YR, 356

Chen YY, 10, 172, 253 Chen Z-S, 563, 565, 743

Cheng F, 449 Cheng H-L, 122

Cheng H-L, 122 Cheng J, 288, 639

Cheng LA, 366, 446, 463 Cheng MS, 295 Cheng NO. 27 Cheng X, 840 Cheong C, 177, 201 Cherney MM, 283, 284 Chernyak V, 57 Cherry JJ, 110 Cherry SR, 125 Chesnokov I, 336-39 Cheung PK, 451 Cheung S, 113 Cheung WF, 452 Chevalier S. 348 Chevrier-Miller M. 341 Chi Y, 342, 363, 364 Chiang LW, 497, 498 Childs S, 569 Chillingworth T, 283 Chimini G, 571, 572, 579 Chin D, 474 Chinetti G. 578 Chipman D, 732, 733 Chipman DM, 732 Chisari FV, 394, 628 Chishti AH, 298 Chiti F. 800 Chitnis CE, 278 Chiu H-J, 226-28, 232 Chiu W. 757 Chizzonite RA, 641 Cho DS, 820 Cho K. 478 Cho MK, 366 Choay J. 455 Chodera JD, 865, 869 Choi C, 481 Choi JS, 614 Choi S, 501 Cholet N, 319 Chong JPJ, 336, 341, 345, 346, 348 Chong LT, 865, 869 Chong SS, 376, 391 Chong STH, 672 Choo B, 460 Choo Q-L, 890 Chopin MC, 732, 733 Chopra R, 211 Chory J, 655

Chothia C. 241 Chow JC, 639 Chow SA, 114, 117 Christ WJ, 639, 641 Christen B. 257 Christensen EI, 412, 422 Christensen HRZ, 512 Christensen RB, 32, 151 Christensen T. 357 Christiano AM, 567 Christiansen J, 227, 228, 232 Christianson DW, 168, 179, 486 Christie BR, 827 Christie G, 297, 427 Christie PD, 228, 231 Christiner DF, 703 Christman MF, 32, 35, 157 Chrzanowska KH, 123 Chu G. 121 Chu H, 823, 827 Chu J-W, 715 Chu RA, 792 Chu S, 167, 173, 175, 178, 181, 683 Chu WM, 376 Chuang RY, 337 Chuang TH, 653 Chuchana P, 107 Chui YL, 37 Chujo R, 860 ·Chun JJ, 125 Chung JH, 264, 800, 807, 808 Church FC, 411 Church GM, 255, 265 Churchill JJ, 92 Ciampa PJ, 775, 776 Cianciotto NP, 644 Ciesiolka J, 176 Cimakasky LM, 626 Cimino M, 501 Cini J. 413

Ciotti M, 555, 556

Citterio E, 249, 250

Cipullo P. 283

Cirillo PF, 619

Citterio S, 642

Civera C, 798 Clack S. 733 Claesson-Welsh L, 444 Clapier CR, 249, 250, 254, 256, 258, 261, 262 Claridge-Chang A, 320, 323, 324 Clark AB, 41 Clark AJ, 74 Clark CD, 352 Clark D, 41 Clark JM, 201 Clark MJ, 415, 819 Clark MW, 179 Clark R, 512 Clark SW, 839 Clark T. 60 Clark TG, 756, 757 Clark-Walker GD, 171 Clarke AJ, 662, 682, 684, 685, 688 Clarke AS, 758 Clarke BR, 682, 683, 688 Clarke DM, 545-47 Clarke J, 794, 802 Clarkson SG, 376, 377, 381, 384, 390, 391 Clausen H. 594 Clayton DA, 167, 181 Clayton RA, 637, 652, 653 Cleaver JE, 43, 154 Clee SM, 572 Clegg RA, 544 Cleland WW, 710, 850, 861, 865, 874, 881 Clement RP, 554 Clementz T, 642, 643, 648, 663 Clendenin C, 308 Clermont S. 639 Clevers H, 264 Clijsters PP, 411 Climent N. 663 Clines G, 445, 446 Clough B, 278, 279 Clouthier DE, 411 Clow J, 76, 77

Clyne RK, 334

Co C, 348, 352, 354, 364 Cobb BS, 257 Cocco L, 771 Cochran S, 13 Cocker JH, 337, 342, 351, 356 Coderch N, 663 Coen CW, 319 Coen ES, 116 Cohen EA, 392 Cohen FE, 288, 626 Cohen IR, 436, 437 Cohen P. 474, 481 Cohen PTW, 474 Cohen S, 594 Cohen SG, 860, 882 Colapietro A-M, 556 Colbran RJ, 483-87, 490, 491, 501, 503 Cole GJ, 437 Cole PA, 611 Cole R, 676, 678 Cole S, 544 Cole SPC, 544, 557-59, 561, 562, 564 Coleman JE, 120 Coleman TR, 341, 353 Coleman WG Jr, 665 Colicos MA, 425 Colliec-Jouault S, 458, 459 Collins FS, 256 Collins J. 283, 284 Collins KI, 556 Collins LJ, 172, 284 Collins LV, 678 Collins RA, 891 Collins RT, 254, 775 Collyer T, 366 Colonna TE, 529 Colot V. 116 Colvin M, 209 Colvin RA, 397 Comer AR, 415 Comer FI, 595 Cone JE, 8 Connell GJ, 903 Connelly JC, 124 Connelly MC, 564, 565

Connor JH, 487 Connor WE, 573 Conquet F, 317 Conrad HE, 436, 440, 455 Conrad RM, 630 Consler TG, 578 Constantinescu A, 109, 124, 126 Cook JG, 340, 355 Cook PF, 864, 869 Coomber-C, 496 Coomber CJ, 496 Coombs GH, 282-84, 288, 293, 294, 299 Cooney AM, 573 Cooper BF, 839 Cooper JA, 278, 415-17, 421, 715, 756, 759, 773 Cooper SJ, 238 Cooperman BS, 834, 836 Cooperstock RL, 499 Copeland J, 777 Copeland NG, 477 Copeland SC, 825, 827, 828 Copeland WC, 36, 147, 149, 155, 156 Cordeiro-Stone M, 92, 93 Corder AB, 547 Corder EH, 424, 425 Cordes EH, 652 Cordier A, 172 Cordon-Cardo C, 377 Corey EJ, 289 Corfield AP, 596 Cornacchia L. 568 Cornelius F. 512 Comeo B, 121, 123 Corona DF, 250, 254, 255, 258, 262, 758, 767 Corpina RA, 122 Corradin G, 295 Corradin S, 295 Corrales S, 797, 808 Corson LB, 35 Cortés J, 720, 722, 730, 736, 737 Cosma MP, 266, 764 Costa EM, 286, 416

Costa-Pinto D. 293 Costilow RN, 7 Cota E, 802 Cote J, 256, 257, 259, 260, 262, 758, 763, 764, 767, 768 Cotter RJ, 642-45, 647, 648, 653-55, 667 Couchman JR, 436 Coucouvanis D, 230, 231 Coue M, 352, 364 Coughlin BC, 295 Coulton JW, 652, 690 Courcelle JA, 20, 29 Coux O, 289 Covey DF, 554 Cowan JA, 222, 901, 908, 909 Cowfer D, 615 Cox BE, 428 Cox K, 728, 733, 740 COX MM, 71-100; 20, 25, 29, 31, 35, 72, 74-80, 83-86, 88, 90 Cox RD, 413 Coyle S, 561 Cozzarelli NR, 29, 74, 95, 391 CRABTREE GR. 755-81: 251, 252, 703, 758-60, 764, 769, 772, 773, 776 Craft J, 167 Cragg GM, 747 Craig AW, 379, 381, 393, . 397 Craig C, 769 Craig L, 124, 545 Craig NL, 120 Craig R, 579 Craigie R, 114, 120 Craik CS, 286-88 Crain BJ, 424 Crain PF, 838 Crain-Denoyelle A-M, 891, 892, 904, 905 Cramer WA, 224 Crane JC, 787, 803 Crary SM, 168, 179

Crawford AR, 568
Crawford BE, 448, 451, 454,
456
Crawford JM, 568
Creeger ES, 668
Cregut D, 798
Creighton S, 210
Cresteil D, 568, 569
Cretney E, 554
Critchlow SE, 122
Crnogorac-Jurcevic T, 819
Croce K, 602
Crocker PR, 702
Cronk B, 492
Croop JM, 551, 553
Crosby J, 860, 882
Crosby MA, 774
Crosio C, 384, 393
Cross AS, 659
Cross FR, 366
Cross GA, 295
Cross SH, 65
Crothers DM, 703
Crowell DN, 642
Crowley DJ, 29
Croyle M, 519, 525
Croyle ML, 526
Crugeiras J, 860
Cruzalegui FH, 483
Csiszar K, 567
Cuatrecasas P, 483, 485
Cuenin C, 764
Cuesta R, 179, 377, 384,
385
Cui H-R, 547, 558
Cui WD, 861
Cui Y, 558, 562-64, 577
Cumano A, 32, 155
Cummings RD, 595, 596,
602
Cundliffe E, 720, 728
Cuniasse P, 214
Cunningham AM, 671
Cunningham MD, 643
Cunningham RP, 93
Cuomo CA, 111, 113, 121
Curley GP, 286
Curran T, 413, 416-18, 425

Currie CG, 659 Curtis EA, 901, 902 Cutler DJ, 319 Cutler JGB, 554 Cvetic C, 344, 353, 354 Cynkin MA, 675 Cyster JG, 596 Czeisler CA, 308 Czernik AJ, 483, 487 D Daan S, 310 Dabrowska R, 474 Daggett V, 787, 794, 804, 807 Dahan A, 35, 36, 39, 103, 157 Dahiya A, 253, 776 Dahl N, 569 Dahlberg AE, 908 Dahlberg JE, 377, 384, 388, 389, 394, 395 Dahlmans VE, 413 Dahm SC, 899 Dahmann C, 351 Dahmén J. 623 Dai Y, 120 Dairaghi DJ, 181 Dalton S, 352 Daly SE, 518 Dame JB, 283 Damgaard CK, 821, 841 Damiola F, 310-13, 316, 317, 321, 326 Danaher RJ, 671 Dance I, 231 Daneholt B, 757 Dang YL, 171 Danho W, 479 Daniel A, 890 Daniel C, 254, 761 Daniel M, 644 Daniels C, 678, 679, 681, 685, 688 Danishefsky I. 449 Danishefsky SJ, 598, 600, 619, 703

Dankert M, 678 D'Arcangelo G, 413, 416, 417, 425 Darden TA, 215, 448, 449 Darlington GJ, 390 Darlington TK, 309 Darr SC, 176 Darveau A, 392 Darveau RP, 643, 644 Das G. 32 Das Gupta C. 93 da Silva AX, 318 da Silva LP, 279 Datta S, 80, 84 Daubresse G. 253 Daugherty MA, 789, 794, 803, 808 D'Auteuil M, 126 Davey MJ, 358 Davey RA, 566 David G, 450, 457 David L, 448 Davidson L, 121 DAVIDSON N, xii-xxiv Davidson NO, 40 Davies DR, 120 Davies GJ, 668, 685 Davies SL, 32 Davis DD, 106 Davis EM, 123 Davis FC, 309, 312, 315 Davis M, 37 Davis NJ, 623 Davis NM, 416 Davis RW, 84, 86, 92 Davis WB, 54, 57 Davison MT, 481 Dawson PE, 625 Dawson TR, 829 Day JJ, 169, 170, 179 Deacon AM, 665 Deadwyler S, 827 de Agostini AI, 459 de Agostini AL, 447 Deakin JA, 437, 444 Dean DR, 227, 228, 232 Dean M, 538, 544, 555-57, 565

DeAngelis K, 342-44 DeAngelis PL, 684 DeBenedetti A, 453 Debije MG, 66 de Boer AG, 550 De Boer G, 553 De Boevere MJ, 553 de Bruin M, 556 Debry P, 554 DeCamilli P. 497, 498 de Chasseval R. 121, 123 Decker H, 740, 741 Deckert G, 652, 653 DeCloux A, 107 de Cock H, 637, 652 DeCristofaro MF, 776 de Diego JL, 289, 290 Deehan R, 419 Deeley RG, 544, 558, 559, 561, 562, 564 Degano M, 614 De Graaf D, 548 deGraaf J, 659 DeGrado WF, 484, 809 de Groot R, 126 Deguchi T, 482, 488 Deguercy A, 279 De Haas M, 548, 556-59, 561, 563, 564, 566 Dehlheimer JL, 560 de Jong AW, 32 De Jong LA, 555 Dekker C. 68 Dekker J. 595 de Kloet ER, 550 De Koninck P, 483, 487, 489, 495, 496, 498, 501, 503 DeKoster GT, 614 de Lacey AL, 233, 235 de la Chapelle A, 445 Delaforge M, 705 de Lange ECM, 549, 550, 560 de la Serna IL, 253 De Las Penas A, 32, 35, 157 Delattre O, 776 Delbos F. 40

Dell A, 672 Della Seta F, 362, 364 Dellaire G, 255 Delmolino L, 339 Delmolino LM, 343, 351, 354, 364 DeLorenzo RJ, 475, 500 Del Nerv E, 286, 288 De Lucia P. 28 de Lumley-Woodyear T, 68 Demar M, 295 DeMaro J, 423, 427 Demengeot J, 121 Dement WC, 315 Demers DA, 253 Demosky SJ, 573 den Boer A, 637 den Brok JH, 377 den Elzen N, 339, 355, 356 Denepoux S, 39 Deng J-S, 377, 381, 396 den Hartog R, 637 Denizot F. 571 Denner L, 485 Dennis C, 262 Denton MD, 554 Denzel A, 122 DePamphilis ML, 337, 339, 340, 355 De Pont JJHHM, 519, 523, 525 de Prat Gay G, 802 Deregnaucourf C, 298 Derhy Z, 280 De Rienzo A, 461 Derkach VA, 476 Deroo BJ, 253, 758 Derrick WB, 899, 900 Dervan PB, 79, 703 Dervitskaya VA, 619 DeRyckere D, 342 de Sanchez VC, 318 Deshpande G. 398 Desiderio SV, 107, 119, 124

de Leau ES, 124

de Lera LT, 156

Delforge M. 705

de Lera TL, 36, 39, 156-58

Des Marais DJ, 227 de Souza W, 286 Desrayaud S, 550 Des Rosiers MH, 319 Dessen A, 710 Dessi F, 827 De Strooper B, 426, 427 DeTomaso AW, 519, 525 Detweiler CS, 351, 362 Deuring R, 249, 254, 255, 758, 761, 775 Deutzmann F. 609 Devault A, 551 de Villartay JP, 121 Devoret R; 21, 22, 27, 29 De Vree JML, 548, 563, 564, 567-70 De Vries EGE, 558, 562 de Vries GJ, 310 de Vries S. 68 de Waard P. 449 De Waart DR, 562, 576 Dewan JC, 895, 900 Dewaste V, 772 De Weer P. 522 DeWitt JG, 861 Dey S, 544, 547, 549 Dezelee P, 823, 831 Dhainaut JF, 639, 641 Dhar SK, 250, 336, 337, 339, 341, 344, 353, 354, 357 Dhillon N. 730 Dholakia JN, 384, 396 Dianov GL, 150 Diaz M. 40, 538 Diaz P, 661 Di Capua E, 77 Dichtl B, 167, 173, 175, 178, 899, 900 Dickstein B, 554 Di Croce L, 254, 257, 577, 578 Dieckelmann M, 668 Diederich W, 578 Diederichs K, 652, 690 Diederichsen U, 52 Diehl V, 38

Dierich A. 107 Dietrich CG, 562, 576, 626 Dietrich CP, 437 Dietschy JM, 426 Diffley JF, 337, 339, 342, 344, 345, 348, 349, 351-53, 356, 359, 362, 364, 365, 367 Difilippantonio MJ, 121, 123, 124 DiGabriele AD, 439 Dijkema R, 831 Dikkes P. 122, 420 Dill EA, 61 Dill KA, 785, 795, 799, 803, 804 Diller JD, 355, 365 Dilley GE, 828 Di Luca M, 501 Dilworth FJ, 257, 267 Dilworth MJ, 232 DiMario PJ, 407 Dimitrov S, 248 Dimitrova DS, 365 Dimock K, 823, 830, 831 Dimova D, 251, 264 Dinarello CA, 636, 639 Ding J, 211 Ding M, 350 Dingemans KP, 568 Dingwall C, 427 Dinner AR, 803, 804 Dinter-Gottlieb G, 890, 894, 895, 898 Dion HW, 723 Dionne I, 149 di Padova F. 659 di Padova FE, 659 DiRenzo J, 267 Dirnagl U, 319 Dismukes GC, 11, 242 Distel B, 574 Distler J, 739 Divecha N, 121, 771 Dixon DA, 25 Djinovic-Carugo K, 239 Dluzewski AR, 278 Dmitriev BA, 653

Do CC, 27 Dobbek H, 236, 238 Dobson CM, 798, 799, 803, 810 Dodson LA, 21 Dodson RJ, 637, 652 Doering TL, 456 Doerrler WT, 642, 644, 645, 647, 648 Doggett NA, 566 Doherty EA, 888 Dohmae N, 20, 32, 33, 153 Dohno C, 52, 54, 64 Dohrmann PR, 366 Doi T. 406 Dolan M, 450 Domann E, 415 Domann S, 712, 722, 741 Domdey H, 568 Dominguez DY, 839 Dominguez O, 36, 39, 156-58 Domowicz M. 445 Donadio S, 705, 720, 722 Donaldson AD, 362, 366 Donatsch P. 551 Donelson JE, 295 Dong SD, 743 Dong Y, 413 Donina IE, 773 Donini V, 411, 415 Donner MG, 563 Donnet C, 515, 523, 526 Donovan S, 348 Dooley DM, 239, 240 Doran CC, 653 Dorfman A, 456, 457 Doria M, 172 Domer S. 908 Dorobek B, 550 Dosanjh MK, 193, 194 Dosemeci A, 481, 482, 496, 500, 501 dos Reis FCG, 286, 288, 289

Dotson GD, 642

Douar AM, 574

Dotti CG, 426, 427

Doublie S. 211 Doudna JA, 888, 891-93, 897-99, 902, 905-7, 910 Dougan ST, 407, 414, 421 Douglas MG, 171 Douki T, 63 Doumith M, 720, 722, 736, 737 Doupnik CA, xxi Dourandin A, 52, 54 Dove WF, xv Dowbenko D, 605 Dowell SJ, 365 Dowhan W. 648 Downes M, 579 Downs JA, 123 Doyle LA, 555, 556 Dovle PS, 286, 287 Doyle TW, 703 Drach J, 554 Drachman DA, 427 Draeger G, 720, 722 Dragun D. 412, 422 Drainas D, 170, 172, 179 Drak J, 703 . Drakas R, 835, 840 Drake JW, 199 Drake TA, 639 Draper MP, 561 Drapkin R, 758, 759, 764 Dreiker SD, 214 Dreizler EM, 774 Drennan CL, 236, 237 Dressman HK, 199 Drewes G. 420 Dreyfuss G, 378, 392, 393 Drickamer K, 594, 702 Driessen AJM, 547, 683 Driguez PA, 440 Dringen R, 560 Drion N. 550 Driscoll B, 343 Driscoll CT, 390 Driscoll DM, 40 Drobnik W, 572, 578 Druley TE, 547 Drummond K, 437

Drury LS, 342, 351, 364 Druzhinina TN, 687 Dryer L, 446, 450, 460, 462 Dryga O, 361 Du W, 340 Du XH, 288 Dua M, 285, 298 Dua R. 141 Duan Y, 785, 804 Duarte V, 64 Dubey DD, 334 Dubois E. 772 Duboise SM, 293 Duchaussoy P, 440 Ducoux M, 140 Dudley C, 309, 310, 314 Duffield GE, 315 Duffin KL, 282, 283, 285, 286 Duffy CP, 561 Duggleby RG, 732 Duilio A, 411, 415 Dulabon L. 417 Dumas K, 255, 758 Dumas LB, 356 Dunaief JL, 761, 775 Dunbar LA, 512 Duncan G, 450, 451, 456, 457, 462 Duncan RC, 394 Duncker BP, 361, 365 Dunkley PR, 485, 486 Dunlap JC, 308 Dunn BM, 283 Dunn JM, xx Dunn M, 38 Dunn R, xxi Dunn-Walters DK, 38 Dunphy WG, 336, 339, 341. 353 Dunster NJ, 736 Dunussi-Joannopoulos K. 553 Duong C, 578 Dupont G, 497 DuPont HL, 281

Dupont Y, 798

Durbin R, 800

Durgerian S, 477 Dürr D. 579 Dürrbaum I, 639 D'Urso G, 41, 141, 144, 147 Durum SK, 758 Dussault I. 579 Dutreix M, 22, 83, 92 DUTTA A, 333-74; 337, 339, 343-45, 349, 351, 353, 354, 357, 359, 363, 364 Dutton PL, 225, 241 Dwek RA, 450, 594, 612, 619 Dwyer BT, 344, 353, 354, 363 Dyer RB, 787 Dykstra ML, 626 Dynan WS, 121 Dynlacht BD, 363 Dyson HJ, 799, 800, 807, 808 Dyson N, 775, 776 Dzantiev L, 208 E Eady RR, 228 Eakin AE, 286-88

Eakle KA, 519, 525 Ealick SE, 665, 865, 866, 869 Earnest DJ, 315 Eastman QM, 112, 114, 116, 117, 119, 121 Eaton WA, 785-87 Ebbert R, 758, 763 Ebel F. 415 Eberharter A, 250, 254, 255, 258, 763 Ebizuka Y, 705 Ebling FJ, 315 Ebright RH, 260 Echols H, 20, 21, 23, 24, 198, 199 Eck MJ, 407, 414 Eckert KA, 200

Eckhardt M, 619

Eckmann CR, 821 Eckstein F. 889, 899, 910 Edelman AM, 475 Edelman GM, 498 Edelmann W, 40 Eder PS, 167, 173 Edgar DM, 315 Edgar R, 549 Edge AS, 437 Edman C, 477, 499 Edman CF, 477, 499 Edwards S, 141 Edwards YH, 818 Eeken JC, 32 Eekman CA, 552 Egebjerg J, 821, 826, 827, 841 Egelman EH, 74, 77, 84, 90 Eggert US, 743 Eggler AL, 79, 85, 88 Eggleson KK, 282, 285 Eggleston AK, 25, 77 Eguchi S, 251, 264 Ehrilich SD, 732, 733 Ehringer MA, 166, 173, 175 Ehrlich JI, 864, 869 Ehrlich SD, 86, 93 Eichele G. 312 Eichinger D, 289 Eide EJ, 310 Eidels L. 665 Eisen JA, 249, 652 Eisenhuth S, 417 Eisenman RN, 256 Eissenberg JC, 146 Eisses JF, 525 Ek B, 452, 459 Ekborg G, 445, 448 Elbein AD, 707 El Darwish K. 454 El-Denary M, 352, 353 Elder JK, 341 Eldin S, 83 Elela SA, 387 ELFERINK RO, 537-92; 544, 553 Elferink RPJO, 549, 553. 562, 567-70, 576, 650 Eley DD, 52

Elfring LK, 254, 761, 775 Elgavish A. 445 Elgin SC, 769 Elhalabi JM, 735 Elias-Arnanz M, 797, 808 Eliezer D, 800, 807, 808 Eliseenkova AV, 439 Elkon KB, 377 Elledge SJ, 147, 335, 360 Ellenberger T, 20, 211 Ellermann JM, 319 Ellestad GA, 723 Ellies LG, 608 Ellin F. 446, 463 Elling L, 728, 735 Elliott CJ, 561 Elliott SJ, 242 Elliott WH, 707-9 Ellis RJ, 810 Ellis SR, 171 Ellis-Davies GCR, 522, 524 Ellison V, 114, 117 Ellman JA, 287, 611 Elmasry N, 795, 796 Elmquist WF, 565 Elöe A, 790 Elsasser S, 342, 363, 364 El-Sayed NM, 295 Elvingson C, 77 Emerson BM, 264 Emery P, 309 Emery-Le M, 309 Emeson RB, 818, 820, 825, 827-29, 834 Endo Y, 177 Enemark JH, 240 Engel A, 77 Engel JC, 282, 286-88 Engel M, 437 ENGELKE DR. 165-89; 166-70, 173, 175-83, 377 Engelman A, 114 Engelman DM, 120, 232, 785 Englander SW, 790, 792, 799, 809 Engler P, 105, 107

0

Enslen H, 475 Eom SH, 211 Eppenberger HM, 378 Epple R, 66, 67 Epps N, 182 Epstein JA, 34, 154 Erdjument-Bromage H, 251, 252, 257-59, 764, 766, 769 Erdmann VA, 176 Erhenstein MR, 37 Erickson HP, 596 Erickson JA, 231 Erickson JW, 283, 284 Eriksson I, 452, 459 Eriksson L, 437, 456 Eriksson PS, 426 Eritja R, 21, 23, 28, 29, 40, 193, 201 Ermekova KS, 415 Ermer J, 861 Ermler U, 236 Ernest S, 553 Erneux C, 772 Ernst RK, 645, 647, 648, 653, 661 Ernster L, 323 Erondu NE, 475, 476, 498, 500 Ersfeld K, 290 Ertesvåg H, 454 Ervin J, 787 Escalante CR, 20, 154 Escalante-Semerena JC, 80 Eschle D, 823, 831 Esford LE, 446, 450 Eshete F. 495 ESKO JD, 435-71; 445-57, 460, 462, 595 Esmon CT, 639 Esposito G, 32, 39, 155 Esser V, 411

Estep PW, 255, 265

Estes PA, 834, 836

Etchison JR, 456

Etges R, 295, 297

Evan GI, 336, 341

Estill SJ, 314

Evans CA, 381, 407, 413 Evans CF, 173, 384 Evans JW, 121 Evans RM, 315 Eveland SS, 642 Evenski A, 150 Everest P, 643 Evers E, 637, 652 Evers R, 548, 557-63 Ewald A, 757 Eyre H, 566 Evring EM, 852, 882 Eytan GD, 539, 548 Ezban M, 411 Ezekiel UR, 105 Ezrokhi M, 337

Fagarasan S, 40 Fager G, 444 Fahrenholz F, 426, 427 Faili A, 35, 36, 39, 157 Faine S. 653 Fairman R, 789 Falcone DJ, 428 Falcone JM, 66 Falconer DS, 416 Fallarino A, 678 Fallon JR, 499 Fambrough DM, 516, 529 Fan GP, 446, 463 Fan H-J, 234, 235, 376, 377, 379, 381, 384, 386, 390, 395-98 Faneyte IF, 552, 555, 556 Fang KS, 787, 800, 806 Fang L, 358 Fang M, 771 Fang XW, 176 Fangman WL, 362, 365, 366 Fanning AS, 415 Fanning E, 145, 147, 342, 343, 351, 354, 363, 364 Fansson LÅ, 448 Fantes PA, 145 Fanti L, 249, 254

Fardel O, 562

Farese RV Jr, 412, 422 Farley RA, 519, 525 Farquhar MG, 412, 415 Farr GH 3rd, 421 Farrell RA, 381, 383 Farrell RC, 318 Farrens DL, 529 Fasching D, 415, 427 Fassbender K, 426, 427 Fattel-Facenda LV, 291, 297 Fattinger K, 576 Faust B, 712, 722, 741 Faux MC, 479, 483 Fauzi H, 900, 905 Favre A, 892 Fazakerley GV, 214 Fazzio TG, 255, 265 Feaver WJ, 35, 38, 154, 199 Fedor MJ, 891, 897, 901, 908 Fedorov NB, 477 Feeney AJ, 106 Feig AL, 898, 899, 901 Feil R. 574 Feingold DS, 454, 457 Feizi T, 595, 702 Felder MP, 823, 831 Feldman MF, 676 Feldmeyer D, 826 Feldstein PA, 889 Fellin R, 420 Felts AK, 57 Fendler K, 512 Feng L, 343 Feng Q, 257, 265 Feng W, 41, 144, 147 Feng Y, 772 Feng Z, 223 Ferguson AD, 652, 690 Ferguson BM, 365 Ferguson DJ, 6 Ferguson MAJ, 626 Ferguson N, 797 Ferguson SJ, 239 Ferhat L, 827 Fern D, 623 Fernández E. 741 Fernandez JM, 787

Fernandez VM, 233, 235 Fernandez-Saiz M. 62 Ferner M, 236 Ferner R, 236 Fernig DG, 439 Ferrari M, 148 Ferrari S, 250, 254, 255, 258 Ferré-D'Amaré AR, 888, 891-93, 895, 897, 902, 904, 906, 907, 910 Ferrier P, 126 Ferriola PC, 461 Ferry JG, 236 Fersht AR, 787, 793-97, 801, 802, 804, 806, 807, 903 Fevre M. 668 Fewson CA, 716, 717 Feyzi E, 437, 443, 444 Fiaschi T, 800 Fiebig KM, 799 Fiebig T, 52, 54 Field MD, 312, 313 Fields RD, 495 Fields S, 180, 715 FIERKE CA, 165-89; 166, 168-70, 179, 639, 642, 652-55, 890, 899 Fierro-Monti I, 819 Fiete D, 615 Fiette L, 776 Fieuw-Makaroff S, 486 Filipkowski RK, 477 Filipowicz W, 181 Filippini S, 741, 748 Filla MS, 440 Filmus J, 436, 437, 461 Finch RA, 549, 559-62 Findeisen M. 352, 353 Fink GR, 766 Fink HW, 68 Finley D, 785, 810 Finn BE, 794 Finnegan MG, 228 Finnie NJ, 121 Fiore F, 411, 415 Fiori PL, 297 Fischer A, 121

Fischer G. 785, 810 Fischhaber PL, 35 Fish SA, 720, 728 Fishel DR, 809 Fisher AG, 257 Fisher C, 807 Fisher DA, 308 Fisher GA, 552, 553 Fisher K, 232 Fisherman SE, 728, 733, 740 FitzGerald DJ, 410, 411 FitzGerald GA, 309, 315 Fitzgerald ML, 436 Fitzgerald MP, 199 Fitzgerald P, 146 Flaggs GW, 639 Flaherty DB, 420 Flajnik MF, 40 Flanagan JF, 249 Flatter E, 35, 36, 39, 157 Flaus A, 249, 250, 254, 258, 259, 261, 767, 768 Flavell RA, 544, 559-62, 639 Flay N, 456 Fleming KG, 120 Flens MJ, 560 Fletcher CD, 253 Fletcher JM, 446, 460, 463 Fletterick RJ, 286-88 Fleury-Olela F, 312, 313, 316, 317, 321, 326 Flick K. 144, 147 Flitsch SL, 623 Flp TH, 639 Flohé L, 9 Florent I, 280 Flores MJ, 72, 74, 93 Flores-Rozas H, 41 Florián J. 860, 871 Florin E-L, 626 Flory DM, 444 Floss HG, 709, 720, 722 Flynn EH, 703 Flynn PM, 564, 565 Fogelgren B, 253 Foiani M, 147, 148 Fojo AT, 553

Fojo T, 553, 554 Foldesi A, 177 Folta-Stogniew E, 78, 79 Fong AM, 596 Fong YL, 483-85, 487, 488, 490, 491 Fonjallaz P, 310 Fonstein L, 739, 740, 748 Fontecilla-Camps JC, 233-36 Forbush B, 526 Forchhammer K, 9, 10, 12 Ford RC, 545, 558 Forgacs E, 412 Forge V, 798 Forman BM, 578, 579 Forman-Kay J, 800 Formosa T, 41, 74, 355 Forsberg E, 446, 452, 462, 463 Forsberg LS, 653, 657, 662 Forsburg SL, 348, 360 Forsee WT, 457, 684, 685 Forster AC, 181 Forster MJ, 453 Forstrom JW, 9 Fortini M, 594 Fortini P, 145, 148, 150 Forzley K, 54, 66 Foster PL, 31, 32 Foster RG, 312, 315 Fotedar R. 146 Foulkes JG, 474 Fourcade S, 578 Fournet B, 688 Fourrey J-L, 892 Foury F, 148 Foustock S, 318, 326 Fowler P, 628 Fowler SB, 787, 794, 802 Fowler SD, 283 Fox B, 450, 462 Fox JW, 416 Fox K, 547 Fox RO, 166, 176, 177 Foxwell N, 643 Fracasso PM, 552 Fracchiolla N, 38

Frackowiak RSJ, 319 Frame MJ, 293, 294 Frampton J, 9 Francis D, 341 Francis NJ, 774 Francis SE, 282-85 Franco AV, 681 Francoeur AM, 376, 378, 381, 394, 396 Frank BL, 703 Frank DN, 166, 168, 170, 173, 175, 177 Frank EG, 21, 23, 24, 27, 34, 36, 38, 40, 41, 154, 155, 158 Frank EK, 155 Frank KM, 122 Frank MH, 554 Frank R. 415, 417, 421 Franke I, 414 Frankel S, 769 Frank-Kamenetskii MD, 79 Frankland PW, 476 Franklin C, 282 Franklin MC, 137, 139, 211 Fransen JA, 519 Fransson LÅ, 449 Frappier F, 281 Frasch AC, 286 Fraser BA, 652 Fraser CM, 637, 652, 653 Fraser K, 562 Fraser-Reid B, 626, 628 Frattini A, 121 Frattini MG, 354 Freeman M. 594 Freemont PS, 120 Frees KL, 655 Freeze HH, 456, 595 Frei C, 772 Fretz S, 182 Frevert U, 289 Frey MR, 183, 235, 236 Frey PA, 7, 707-10, 724, 725, 735, 874

Frey S, 39, 40

Frick DN, 140

Frey U, xxii

Frick W, 628 Fried LM, 121 Friedberg EC, 18, 21, 29, 31, 33-35, 41, 135, 136, 148, 151, 153 Frieden R, 422 Frieden RW, 794 Friedl A, 440 Friedman JR, 265 Friedman KL, 365, 366 Friedman RA, 213 Friedrich T. 522 Friedrichson T, 626 Friend DS, 446, 452, 462 Friesner RA, 57 Frijters CMG, 568, 570 Frirdich E, 659 Fritz P. 562 Fritz TA, 449 Fritze L, 440 Fritze LMS, 455, 457, 458 Fritzsche I, 548, 553 Froelich CJ, 554 Fromental-Ramain C. 257, 267 Fromm MF, 550, 562 Fromme I, 723 Fromme P. 242 Frouin I, 144 Fruman DA, 771 Fry CJ, 249, 251, 259, 267 Frydman J, 785, 810 Fryer CJ, 163 Frykman PK, 412 Fuchs M, 758, 759, 764 Fuchs RPP, 18, 31, 33, 41, 43, 29, 135, 136, 151, Fugmann SD, 103, 120, 122, 123 Fujii I, 705 Fujimoto S, 106 Fujioka H, 278, 279 Fujisawa H, 475-79, 482, 485, 487, 488 Fujise M, 446, 460, 463 Fujita M, 343, 352

Fujiwara Y, 122

Fujji S, 29 Fuki IV, 436 Fukuda M, 596, 614, 702, 757 Fukuda MN, 614 Fukudome K, 639 Fukuhara H, 171 Fukui H, 312, 316 Fukunaga K, 475, 476, 486, 487 Fukuto JM, 869 Fukuyama T, 325, 326 Fullbright PW, 789 Fuller SM, 200 Funderburgh JL, 436 Funke H, 572 Furey W, 732 Furgeson S, 251, 264 Furlong ST, 553 Furstenthal L, 363 Furukawa K, 448 Furuki T. 860 Furuse M, 124 Furuya K, 154 Fusco C, 38 Futch TA, 460 Fygenson DK, 198 Fyodorov DV, 249, 250, 254, 255 Fyrberg AM, 251 Fyrberg EA

G

Gaasterland T, 652, 653 Gabb MM, 449 Gabb MMG, 450, 451 Gaber RF, 356 Gabius HJ, 702 Gabius S, 702 Gabriel O, 707–9 Gadsby DC, 522, 546 Gadue P, 825 Gag YX, 251 Gagneux P, 594 Gainer H, 318, 319 Gaisser S, 720, 722, 736, 737, 740 Gajiwala KS, 343 Galanos C. 639 Galarneau L, 252, 758, 759, 763 Galibert F, 22, 83 Galipeau J, 554 Gallagher JT, 437, 439, 444 Galli SJ, 440 Gallie BL, 553 Gallo A, 822 Galloway SM, 636, 641, 642, 655 Gallwitz D. 383 Galusha SA, 253 Gambello MJ, 420 Gamian A, 671 Gamper HB, 79 Gamulin V, 175 Gandecha AR, 720, 728 Gandour RD, 852 Ganesh N. 80, 84 Ganetzky B, 823, 828 Gange D, 703 Ganjeizadeh M, 531 Ganster RW, 251 Ganther HE, 8 Gantt SM, 289 Gao B, 560 Gao GJ, 171 Gao J, 202, 209 Gao JL, 866, 869, 873 Gao M, 544, 547 Gao YE, 284, 555, 556 Gao YJ, 121, 122 Garber RL, 168. Garcia AE, 785 Garcia C, 38, 808 Garcia CK, 420 Garcia CT, 287 Garcia JA, 309, 310, 314 Garcia KC, 614 Garcia-Barreno B, 823 Garcia-Barrio MT, 179, 377, 384, 385

Garcia-Blanco MA, 397

Garcia-Bustos JF, 772

Gait MJ, 889, 908

Garcia-Diaz M, 36, 39, 156-Garcia-Paris M. 175, 177 Garcia-Rivera G. 290 Garcin E, 235 Gardiner K, 819 Gardner P, 477, 487 Gardoni F, 501 Garner CD, 238 Garner CW, 662 Garner TL, 820, 835 Garnier-Suillerot A, 558 Garrels JI, 381, 396 Garrett TA, 642, 648 Garrick D, 249 Gary S, 145 Gasdaska JR, 13 Gasdaska PY, 13 Gaskell PC, 425 Gaspar JA, 689 Gasparutto D, 64 Gasper SM, 59, 64 Gass P. 826 Gasser SM, 361, 365 Gassner GT, 712, 714, 715 Gates MA, 415 Gatignol A, 384, 395 Gatmaitan Z, 576 Gatti DL, 545, 546 Gatto C, 512, 516, 519, 522, 524, 525, 530 Gaub HE, 787 Gaumann AKA, 550 Gäumann E, 723 Gaunitz S, 859, 882 Gausepohl H, 410 Gauss GH, 107, 121 Gauss P. 177 Gautel M. 787 Gauthe D. 578 Gauthier F. 288 Gautier J, 346, 352, 361 Gavel Y, 612 Gavin IM, 258, 259, 262, 767 Gavin KA, 339, 349 Gavin M. 253, 776 Gawley RE, 866

Gay NJ, 83, 379 Gayle M, 177 Gaynor M, 908 Gazit A, 421 Gdula DA, 254, 255, 258, 758, 767 Ge H. 255 Geacintov NE, 52, 54 Gearhart PJ, 32, 37, 38, 40, 158 Gebicke-Haerter PJ, 413 Gebuhr T, 253, 776 Geering K, 512, 519, 525, 530 Geerlof A, 663 Geeves M. 806 Gegenheimer P, 170-72, 179 Gegonne A, 257 Geiger JR, 823, 826, 827, 833, 834 Geiman TM, 255, 758 Geissmann F. 40 Gekakis N. 309 Gelbart ME, 255 Gell D. 121, 764 GELLERT M, 101-32; 103, 105-9, 111-14, 116-19, 122-24 Gendrot G, 318 Geng FQ, 251 George AM, 545 George CX, 819-21, 831 George SJ, 231 Georges E, 553, 569 Georgiadis MM, 228 Georgopoulos C, 642, 643, 648, 650 Geraghty DS, 350 Geraghty MT, 574 Gerard RD, 410 Gerber AP, 813-22, 835, 840 Gerber J, 758, 759, 764 Gerber SI, 443 Gerbi SA, 334 Gerckens LS, 639, 642, 652 Geremia RA, 668, 744

Gerik KJ, 140, 141 Gerin JL, 831 Gerken TA, 596 Gerlach JH, 557, 564 Gerlach VL, 34, 35, 38, 154, 199 Gerlach WL, 891 Gerloff T, 554, 569 Gerlt JA, 874 Germann UA, 547 Gerot O, 64 Gerrard B, 557, 565 Gerrard SP, 391 Gerratana B, 710 Gerstein RM, 105 Gertler FB, 415, 417, 421 Gething, M-J, 411 Getty RR, 628 Geuze HJ, 410 Geyer CR, 909 Ghaemmaghami S, 810 Gharbi-Benarous J, 705 Ghersi-Egea J-F, 560 Ghetti A, 827 Ghirlando R. 123 Ghiso J. 289 Ghosh JK, 126 Giardina PC, 657, 659, 671 Gibb AR, 659 Gibbons GF, 317 Gibbons HS, 644, 645, 648, 653 Gibbons RJ, 249 Gibbs E, 140, 145 Gibbs PEM, 32, 155 Gibbs RA, 202 Gibbs RJ, 659 Gibbs RV, 444 Gibson BW, 661 Gibson KJ, 197 Gibson T, 254 Gibson TJ, 835 Giedzinski E, 43, 154 GIESE B, 51-70; 52, 54-56, 58, 61, 65 Giese KP, 477

Gifford A. 105-7

Gijbels MJ, 413

Gilbert DJ, 477 Gilbert DM, 339, 355, 356, 365 Gilbert JM, 675 Gilbert ME, 425, 660, 671, 672 Gilfillan S, 107 Giliani S, 121 Gill DR, 538, 553 Gill SR, 637, 652, 759 Gillespie JR, 800 Gillespie PJ, 341, 355 Gilliland G. 223 Gillmor SA, 288 Gillon W, 885 Gilman-Sachs A, 296 Gilmanshin R, 787, 800, 806 Gilmour RS, 771 Giménez-Gallego G, 439 Gimpl G, 426, 427 Gineitis D, 777 Gingras AC, 498 Ginsberg TR, 482, 498 Ginsburg H, 282, 285, 298 Ginsburg V, 707 Giraldo R. 557 Girardet S. 525 Girardin SE, 641 Giraud M-F, 709, 710 Gispen WH, 501 Glaab WE, 554 Gladen A. 445 Gladue RP, 704 Gladwin ST, 796 Gladyshev VN, 11-13 Glaser L, 707-9 Glaskin-Clay M, 665, 666 Glass CK, 316 Glasser L, 707 Glazier S, 827 Glemarec C, 177 Gliemann J, 411 Glockner G, 655 Gluck A. 177 Glunz PW, 596, 598, 600, 609 Glushka J. 671 Gluzman IY, 282-86

Glynn IM, 520 Gnudi L. 531 Gocayne JD, 381, 407, 413 Godavarti R, 445, 461 Godin I, 32, 155 Godon JJ, 732, 733 Godyna S, 425 Goebel P. 126 Goedert M, 424 Goff SP, 775 Goffinet A, 413, 416, 417, 420, 425 Goffinet AM, 413, 416 Gohring F. 348 Gokhale RS, 705, 747 Golbik R, 787 Gold H, 167, 172, 173 Gold HA, 167 Gold L, 909 Goldberg AL, 289 GOLDBERG DE, 275-305; 282-86, 299 Goldberg IJ, 444 Goldberg J, 122, 481, 485, 492, 890 Goldberg JM, 491, 492, 796, 806 Goldberg MB, 673 Goldberger O, 461 Golden BL, 890, 899, 903 Golden SS, 308 Goldenberg DP, 794, 795 Goldenring JR, 475, 500 Goldfarb P. 9 Goldin AL, xx Golding A, 126 Goldman RC, 653 Goldmark JP, 255, 265 Goldowitz D, 417 Goldsby RE, 144 Goldshleger R, 512, 514, 522, 528, 529 Goldstein JL, 406, 410-12, 417 Goldstein LS, 418, 553 Golecki JR, 688

Golenbock DT, 639, 642

Golik J, 703

Golub E. 74 Gomelsky L, 109 Gomes XV, 146 Gomez CA, 121 Gomez-Paloma L, 703 Gondcaille C. 578 Gong F, 454 Gonias SL, 413 Gonsior SM, 757 Gonzales-Duarte R, 709 Gonzalez B, 475 Gonzalez FA, 37 Gonzalez J. 289 Gonzalez JL, 416 Gonzalez MA, 36, 39, 156-58, 181 Gonzalez-Porqué P, 711, 712 Good PD, 183, 525 Goodier JL, 376, 377, 379, 381, 384, 386, 390, 395-98 Gooding AR GOODMAN MF, 17-50; 18, 20-25, 27-29, 31-35, 38-41, 72, 75, 76, 135, 136, 145, 151, 153 Goodman MJ, 199 Goodrich KJ, 378, 381, 383, 389, 390 Goodwin B. 579 Goossens T, 37, 38 Gopalakrishnan RS, 909, 910, 912 Gopalakrishnan V, 354 Gopalan V, 166, 168, 171, 176, 177 Gor DO, 290 Gordenin DA, 144 Gordon MY, 444 Gordon T, 376, 379, 396 Gorelick F. 487 Gorelick FS, 487, 497, 498 Gorka C, 110, 116 Gorlatov SN, 13 Gormal CA, 228 Gorman JR, 103, 125 Gorokhov A, 452 Gorshkova RP, 732

Goryshin IY, 116 Gossen M, 336 Goto H. 343 Goto K, 413 Goto S, 461 Goto Y. 798 Gotoh Y, 562 Gotow LF, 444 Gotow T. 346 Gotschlich EC, 652, 671 Gott JM, 818 Götte M. 436 Gottesman MM, 544, 547, 549, 553 Gottesman S; 399, 661 Gotthardt M, 406, 410, 411, 413, 415, 416, 419, 423, 427 Götting C, 444 Gottlieb E, 376, 377, 390 Gotway G, 34 Goubeaud M, 236 Goudriaan JR, 413 Gould E. 426 Gould SJ, 705 Goutsos KT, 450, 451, 456, 457 Govenechea B, 37 Grabarse W. 236 Gradoni L, 288 Graf GA, 573 Graf R, 352, 353 Graham ES, 313 Graham NG, 233, 240 Grahame DA, 6, 11 Grainger M, 278, 279 Gralla JD, 391 Grallert B, 147, 360 Grandgenett PM, 295 Granger R, 283 Graninger M, 665, 666 Grant CE, 547, 557, 562 Grant DA, 319 Grant PA, 763 Grant SG, 417 Grantcharova V, 797, 802 Grantcharova VP, 806 Granzier HL, 787

Gualandris A, 423

Grasby JA, 908 Grässel S, 436, 437 Gratzer WB, 278 Graus F. 377 Graves SW, 147 Grawunder U, 122, 123 Gray HB, 222, 225, 787 Gray MD, 411, 415 Gray PW, 639 Graziano MSA, 426 Greasley PJ, 525, 530 Greef CH, 899, 900 Green ED, 390 Green LG, 626 Green MR, 767 Green NM, 518, 524, 526 Green RM, 569 Green SJ, 417 Greenberger LM, 556 Greenfeder SA, 641 Greenfield SR, 52, 54 Greengard P, 474-76, 482, 483, 485, 487, 488, 497, 498, 500 Greenspan NS, 628 Greenspan RJ, 479 Greenwald I, 407 Gregg RE, 573 Gregory PD, 248, 249, 252, 267 Grellier P, 279-81, 298 Gremer L, 236, 238 Griekspooor AC, 546 Griesbeck O. 772 Griffin EA Jr., 309 Griffiss JM, 657, 659 Griffith CL, 456 Griffith J. 74, 77 Griffith JD, 92, 93, 338 Griffith JW, 351, 354, 363, 364 Griffith LC, 476, 479 Griffiths D, 359 Grigorenko EV, 827 Grigoriev M, 758, 759, 763 Grimaldi MA, 255 Grimaud JA, 444

Grimm C, 377, 384, 389, 395 Grinstaff MW, 52 Grisaru S, 461 Grisebach H, 707, 708, 731, 733, 739 Grishin NV, 573 Grobe K, 451, 452, 455, 463 Groebe DR, 177 Groen AK, 544, 549, 553, 567-70, 572, 579, 650 GROGAN MJ, 593-634; 630 Groisman EA, 644 Groisman R, 758, 759, 763 Grollman A. 35 Grollman AP, 64 Grommé M, 546 Grompone G, 72, 74, 93 Gronow S, 665 Groom KR, 171 Grosjean H, 821, 822 Gross CG, 426 Gross JW, 708-10 Grosshans CA, 378, 381, 383, 389, 390 Grosshans H, 390 Grossman A. 9 Grossman AD, 42, 358 Grossmann JG, 228 Grozema FC, 56, 57 Groziak MP, 864, 865, 874 Gruber JM, 561 Gruebele M, 785, 787, 803 . Gruhn NE, 240 Grunert S. 835, 837 Grunstein M, 248 Gruol DJ, 553 Grupp G, 514 Grupp IL, 514 Gruss C, 250, 257, 355 Grutzendler J, 419 Gruz P. 23, 29, 31 Gsur A, 554 Gu H, 39, 150, 155 Gu YS, 122 Gu YZ, 309

Gu ZY, 66

Guan S, 682, 687 Guarne A, 123 Guastella JG, xx Guckian KM, 194, 201, 202, 212, 214 Gudmundsson G, 31, 32 Guenette SY, 411, 415, 425 Guengerich FP, 64 Guenther B, 145 Guerrier-Takada C, 167, 173, 176, 179, 180, 183 Guex N, 517 Guggenheimer RA, 85 Guha M, 641 Guha S. 761, 775 Guhathakurta A, 116 Guidi CJ, 253 Guidotti A. 416 Guidotti G. 514 Guidotti LG, 394 Guillen E, 445 Guillet C, 281 Guillouzo A, 562 Guimond S, 439 Guina T. 644, 648 Gulbis JM, 145 Gull K, 290 Gulnik SV, 283, 284 Gulotta M. 787 Gundersen TE, 412 Gunn A, 231 Gunn JS, 644, 647, 648, 661 Gunnarsson K, 453 Gunning P. 777 Guntz P. 550 Gunzler WA, 9 Guo D, 153 Guo L. 644, 645, 647, 648, 653 Guo T. 284 Guo Y, 310 Guo ZH, 714, 720, 722, 728, 731 - 33Guo ZW, 618 Gupta RC, 74, 79 Gupta V, 703 GuptaRoy B, 479

Gurish MF, 446, 452, 462 Guschin D, 249, 250, 254-56, 258, 261 Guschlbauer W. 214 Gusovsky F, 639 Gustafsson JA, 163, 257, 577, 578, 763 Gustchina E, 284 Gustke N, 420 Gut J, 285 Guth S, 168 Guthrie C. 387 Gutierrez B, 289, 290 Gutierrez N, 179, 377, 384, 385 Gutin AM, 804 Guyon JR, 126, 250, 259, 262, 264, 268 Guzman CA, 681 Gwinn ML, 637, 652 Gygi D, 661 Gygi SP, 35

H

Ha P. 253 Ha T. 910 Haack JA, 794 Haag S, 740, 741 Haaker H, 228 Haas ES, 166, 175, 176 Haas M, 531 Haase AM, 676, 679, 712 Haase W-C, 600 Habashita H, 284 Haber D. 551 Haber JE, 72, 122, 123, 125, 148, 149 Habets WJ, 377 Habuchi H, 444, 446, 454-56, 463 Habuchi O, 455, 457 Häcker U, 445, 461 Hackett F, 278, 279 Hackett J, 678, 679 Hackett M, 644 Hadchouel M. 569 Haddad G, 553

Hadden J. 238 Haddock BA, 9 Hadley T, 278 Haedens V, 116 Haefliger JA, 419 Haerry TE, 445, 461 Hafeman DG, 8 Hagen R, 228 Hagen SJ, 785 Hagen WR, 238 Hagenbuch B, 566, 569 Hagner-McWhirter A, 454 Hahn S, 264 Hahner LD, 428 Hajjar AM, 639, 823, 830, 831 Hajjar DP, 428 Hajnal A, 257 Hakala J. 722 Hale RS, 730 Hales BJ, 228, 231 Halfter W, 437 Hall AL, 486 Hall DB, 52 Hall JC, 309, 311, 823, 828 Hall MB, 234, 235 Hall MN, 772 Hall TA, 166, 167, 173 Hallén A, 457 Hallis TM, 705, 707, 709, 711, 716, 717, 719, 733 Halsey J, 552, 553 Haltia T, 239 Hamada D. 798 Hamada H, 777 Hamada S, 417 Hamakubo T. 406 Hamana N. 255 Hamann U, 410 Hamer E, 531 Hamiche A, 249, 250, 252, 254, 255, 258, 262, 264, 758, 759, 763, 767 Hamilton G, 554 Hammarsten O, 121 Hammer RE, 406, 410-12,

422

Hammes GG, 790, 800, 806

Hammett LP, 852, 882 Hammond C, 614 Hammond GS, 793 Hamon Y, 572 Hampe W, 414 Hampel A, 901, 908 Hampel KJ, 903 Hampikian G, 52, 56 Hampton R, 626 Hampton RY, 639, 642 Hamrick M, 516, 529 Hamstra HJ, 643 Han BD, 861, 862 Han HY, 565 Han JH, 230 Han JO, 106, 111 Han M, 407 Hanaoka F, 18, 31, 33, 34, 38, 41, 43, 135, 136, 140, 151, 153-55, 199, 352 Hanawalt PC, 20, 29, 249 Hancock REW, 653 Handgretinger R, 776 Haneda K. 616 Hang HC, 595, 605, 621 Haniford DB, 116 Hanisch FA, 450 Hanisch F-G, 595, 609 Hanley RM, 477, 484, 491 Hanna JS, 35 Hanna R, 898, 899 Hannesson HH, 454 Hanrahan CJ, 823, 828, 829, 835 Hansell E, 288 Hansen D, 628 Hansen JC, 248, 262, 908 Hansen JD, 110 Hanser H, 774 Hanson IM, 120 Hanson JE, 652 Hanson PI, 476, 485-88, 491, 492, 495, 496 Hanspal M, 284, 285, 298 Happe RP, 233, 235 Haque TS, 284

Hara H, 558

Hayes JJ, 248

Haracska L, 32-34, 38, 40, 41, 153-56, 194 Harada T. 449 Haraguchi G, 675 Haraguchi GE, 679 Harata M. 758, 763, 769 Harbecke D, 295 Harbers K, 477, 499, 500 Hardiman G, 639 Hardin JA, 376, 377, 388 Hardin SH, 146 Harding MM, 224 Hardingham GE, 773 Hardt WD, 176 Hardy CFJ, 361, 366 Hardy SP, 538 Hare D, 113 Harfe BD, 156 Hargrove P, 569 Harley CW, 318 Harlow E, 363 Harmony JAK, 422 Harris BR, 722 Harris D, 200, 280 Harris DA, 897, 898, 903, 910 Harris JK, 166 Harris JL, 287 Harris KM, 476 Harris ME, 176 Harris P. 866, 869 Harris RJ, 595, 866 Harrison PJ, 828 Harrison PR. 9 Harrison SC, 211, 800 Hart GW, 595 Harth G. 286 Hartl DL, 115 Hartley KO, 121 Hartman RF, 66 Hartmann RK, 168, 176 Hartner J, 825, 826, 829 Hartog A, 562 Hartshorne DJ, 474 Hartwell LH, 341 Hartwich G, 68 Hartwig NG, 126

Harvey SC, 176

Harvie RM, 566 Harwood J, 337 Hasan M. 444 Hasan S, 440 Hascall VC, 436, 449, 456 Haselsberger R, 54 Haseltine W, 392 Hashimoto C. 376, 639 Hashimoto K, 145 Hashimoto S, 377, 378, 381, 393 Hasin M, 645 Hasler U, 525, 530 Hasnain SS, 228, 295 Hass S. 424 Hassan AH, 163, 249, 250. 257-59, 264, 267, 759 Hassell AM, 866-69 Hassell JR, 436, 450 Hassig CA, 256 Hästbacka J, 445 Hastings MH, 312, 313, 315 Hastings PJ, 31, 32, 92 Hatch L. 675 Hatch VC, 568 Hatchikian CE, 233-35 Hatchikian EC, 234, 235 Hathaway TR, 200 Hauge M, 525 Hausdorff J. 552 Hauser H. 769 Hausheer FH, 555 Havas K, 249, 250, 254, 261, 768 . Havel RJ, 410 Haverkamp J, 657, 670, 671, 682, 683 Havinga R, 575 Hawkes R. 416 Hawkins CF, 732 Hawkins-Brown D, 579 Hawn TR, 639 Hay KM, 870 Hayashi F, 639

Hayashi MK, 346

Hayashi S, 319

Haydar TF, 419

Haydock S, 720, 722, 737

Hayes RT, 54, 55 Haynes JD, 298 Haynes PA, 281 Hays LE, 144 Hays S, 23, 28 Hazard S, 573 He CY, 289 He HY, 556 He X, 421, 636, 639, 641 HE XM, 701-54; 705-7, 711, 731 He Y. 310 Healy N, 280 Heard PL, 295 Hearn MG, 411, 415 Heath EC, 707 Heather JD, 319 Heberlein U, 775 Hecht SM, 702, 703 Hecht SS, 558, 559 Heckmann K, 241 Hedman B, 242 Heeger A, 68 Heelis PF, 66 Heenan MM 561 Hegeman AD, 708-10 Hegg LA, 891, 897, 901, 908 Hegy G, 609 Hegyvary C, 523, 524 Heidelberg JF, 652 Heider J, 9, 10, 12 Heidrich HG, 279 Heijn M, 556, 559, 560, 562 Heim R, 772 Heimerl S, 544 Hein WR, 38 Heine H, 642 Heinemann SF, 826, 827 Heinrich G, 116 Heinrich J, 168 Heinrichs DE, 657, 659, 661, 663, 664, 667, 669, 671 Heintz NH, 350 Heise T. 394 Heist EK, 476, 500

Hekker TAM, 659 Helander IM, 644 Held TK, 659 Heldermon C, 684 Helene C, 77 Helenius A, 612, 614 Helenius J, 678 Helfrich-Forster C, 309 Helin J, 602 Helin K, 351, 354, 363, 364 Heliot L, 252, 758, 759, 763 Hell JW, 487, 501, 503 Heller A, 52, 65, 68 Hellman U, 141 Hembrough TA, 417 Hemmerich S, 455, 608 Hemmi H, 641 Hempel WM, 126 Hemsworth DE, 487, 501, 503 Henderson GB, 282 Henderson PT, 52, 56, 62 Hendrich B, 257 Hendrich MP, 228 Hendrick JP, 376, 377, 389, 394 Hendricks M, 339, 349 Hendrickson M. 352 Hendrickson WA, 439 Hendrix M, 703 Hengartner CJ, 251 Hengstschlager-Ottnad E, 413 Henness S, 566 Hennessy KM, 352 Hennet T. 448, 456 Henning D, 376, 394 Henriksson J, 286 Henriksson K, 623 Henrissat B. 668, 685, 744 Henzel WJ, 605 Henzl MT, 228 Heo J, 236, 237 Hérault LP, 440 Herb A, 819, 820, 826, 835, 840 Herbert A, 819, 821

Herbert CG, 453

Herbig U, 342, 343, 351, 354, 363, 364 Herceg Z. 764 Herman K, 708 Herman P, 531 Herman T, 462 Hermann M, 415, 427 Hermelin B, 569 Hermsen HP, 523, 525 Hernandez N, 376, 391 Herold BC, 443 Herrick J. 368 Herrick TM, 416, 417 Herrick-Davis K, 825, 827, 828 Herrmann D, 414 Herrup K, 110, 125 Herschlag D, 874, 888, 890, 891, 895, 897, 901, 903, 909, 910, 912 Hershey ND, xviii Herskowitz I, 337, 349, 758, 764 Hertel KJ, 890, 891, 897, 909 Hertz-Fowler C, 290 Herwaldt BL, 293 HERZ J. 405-34; 406, 410-12, 414, 417, 421, 422, 425, 427 Herzner H, 595 Heslip TR, 445, 461 Hesse JE, 105-8, 111, 123 Hetru C, 609 Hettema EH, 574 Hetzer R. 477 Hetzler BG, 725 Heus HA, 177 Heuser J. 77 Heuser JE, 759 Hey PJ, 413 Hickey EK, 652 Hida A, 311, 316 Hidaka M. 339 Hiesberger T, 413, 416, 417, 420, 425 Hiestand PC, 551 Hietbrink BN, 866

Hieter P. 35, 256 Higashi K, 475 Higgins CF, 538, 541, 544-47 Higgins NP, 74 Higgs HN, 769, 773 High NJ, 672 Higuchi M, 818, 820, 825, 826, 829 Higuchi O, 774 Higuchi S, 554 Higuchi T, 684 Hilbig H, 319 Hildebrand JD, 417 Hildreth JEK, 626 Hilkens J, 595 Hill MG, 68 Hille B. 241 Hille R, 715 Hilley JD, 294 Hilmes M, 148 Hilpert J, 412, 422 Hiltunen TP, 413 Hilvert D, 852, 882 Hindges R, 138 Hinds HL, 476 Hindsgaul O, 702 Hingerty BE, 895, 900 Hingorani MM, 145, 348 Hinkes MT, 436, 437 Hinkle DC, 32, 33, 40, 151, 155 Hinnebusch AG, 163, 251, 385 Hinshaw LB, 639 Hinssen H. 757 Hintermann S, 600 Hinz WA, 310 Hiom K, 111, 112, 114, 116 - 19Hipfner DR, 544, 558, 562 Hiraga S-I, 41, 356, 357 Hirai M, 548 Hirakawa T, 777 Hirama T, 295 Hiramatsu K. 684 Hirano A, 823 Hirano K, 558

Hiraoka N. 608 Hirasawa M. 420 Hirata I, 288 Hirata K, 297 Hirata T, 602 Hirobe M. 684 Hirohashi T, 562-64, 566, 577 Hiroshige T, 316, 325 Hirrlinger J, 560 Hirsch JA, 208 Hirschberg CB, 445, 452, 456, 457, 461 Hirst J. 241 Hisanaga E, 551 Hitchen PG, 672 Ho SN, 703 Ho YK, 417 Hoang L, 790, 799 Hobbs HH, 406, 410, 412 Hobbs M, 636, 647, 676, 717 Hoch B, 477 Hock JB, 323 Hocker CG, 313, 314, 318 Hoda F. 569 Hoehler TM, 227 Hoeijmakers JH, 149 Hoekstra WG, 8 Hoffman BM, 231, 232 Hoffman EJ, 319 Hoffman JA, 609 Hoffman JF, 526 Hoffman L. 554 Hoffman T, 562, 576 Hoffmann FM, 415 Hoffmann HP, 456 Hoffmeister D, 741, 746 Hoffmeister-Ullerich SA, 414 Hoffmeyer S, 554, 579 Hofmann E, 652, 690 Hofmann JF, 344 Hofmann WJ, 563, 757 Hofmann-Rohrer U. 255 Hofrichter J. 787 Hogenesch JB, 309

Hoger T, 823, 826, 827, 833, 834 Hogness DS, 355 Hojo H, 609, 625 Holborn K, 463 Holcenberg JS, 7 Holcik M, 384, 392, 393 Holden JP, 524 Holder AA, 278 Holland IB, 544 Holland JJ, 823, 830, 831 Hollenberg SM, 715 Hollister K, 578, 579 Holló Z. 539 Holloway BP, 376 Holm C, 149 Holm RH, 222, 225 Holman HR, 377 Holmborn K, 446, 463 Holmes AM, 148, 149 Holmes EH, 448 Holmes WR, 496 Holmgren A, 13 Holmgren M, 522 Holmlin RE, 52, 61 Holst O, 636, 645, 652, 657, 659, 660, 666, 670, 682, 683 Holstege FC, 251 Holt AC, 639 Holt RA, 381, 407, 413 Holtermann G, 787, 806 Holtzman DM, 423, 427 Holzenburg A, 558 . Homayouni R, 413, 416, 425 Homesley L, 357 Homma Y, 427 Homolya L, 539 Hong K, 461 Hongo T, 40 Honig B, 213 Honma KI, 310, 316, 325 Honma S, 316 Honrado GI, 315 Hood DW, 657, 671 Hood L, 37 Hooijberg JH, 559, 561, 563

Hooiveld GJEJ, 544

Höök M, 436, 453, 454, 457 Hook SS, 475, 484 Hooper NM, 297, 427 Hopfner K-P, 124, 545 Hoppe D, 421 Hopper AK, 179, 183, 390 Hopper E, 557, 563, 565 Hopwood DA, 705, 712, 722 Hopwood JJ, 437 Hörber JKH, 626 Horchar T. 450 Hori Y. 365 Horii T, 84, 85, 88 Horikami SM, 831 Horikawa K, 312, 316 Horisberger JD, 512 Horn PJ, 262 Horne MC, 487, 501, 503 Horng T, 641 Hornick CA, 410 Horodyski FM, 823, 830, 831 Horrocks P, 283 Hortnagel K, 84 Horton JK, 150, 410, 412 Horton RA, 575 Horton WA, 446 Horvath SM, 424 Horvitz HR, 462 Horwich AL, 785, 797, 802, 810 HÖRZ W, 247-73; 248, 249, 252, 258, 267 Hoshino K, 636, 639, 641 Hosokawa F. 860 Hospod FE, 318 Hosseini G, 440 Hosted TJ, 705, 746 Hou Y, 628 Hou ZH, 336, 339, 343, 349, 354, 359, 363 Houchens C, 354 Hough RF, 819, 840, 841 Houk KN, 865, 866 House C, 479, 483 Houser-Scott F, 166, 175, 179-81, 183, 390

Howard JB, 227, 228, 232,
241 Howard-Flanders P, 79, 86
Howe JG, 390
Howell BW, 413, 416, 417,
421, 425
Howell M, 336, 341
Hozak P, 774
Hrycyna CA, 544, 547, 549
Hsiao HL, 579
Hsieh C-L, 125
Hsieh I, 286, 287, 293, 294
Hsieh SY, 831
Hsu HY, 428
Hsuan JJ, 818
Hu B, 453
Hu D, 348
Hu GX, 446, 463
Hu J, 148
Hu M-CT, xx
Hu P, 376, 391
Hu Q, 411, 415
Hu S, 483, 619
Hu YK, 512, 515, 524, 525,
786
Hua S, 289, 516
Hua XH, 345, 350, 351, 353
Huang CY, 483
Huang D, 224
Huang DW, 339
Huang F, 126
Huang GS, 789, 794, 803,
808 Huong H 211
Huang H, 211
Huang J-D, 551 Huang J-H, 628
Huang L, 289, 290, 461,
575, 576, 715
Huang R-F, 604
Huang S, 183
Huang SC, 319
Huang W, 52, 54
Huang WH, 531
Huang WM, 652, 653
Huang X, 596
Huang Y, 377, 384, 386,
396, 425
** **** ***

Huang YY, 425

Hubbard AL, 576
Hubbard GL, 682
Hubbard SR, 439
Hubbard T, 241
Hubbell WL, 529
Huber CP, 295
Huber M, 831
Huber R, 222, 236, 238, 46
Huberman JA, 334, 368
Hubner G, 861
HÜBSCHER U, 133-63;
134, 138, 140, 141,
145, 146, 150, 151, 19
Huddleston MJ, 377, 381,
386, 394, 396
HUDMON A, 473-510; 479
481, 482, 485, 487,
489, 491, 492, 498
Hudson KL, 639
Hudson KM, 126
Hudson TH, 284
Huete-Perez JA, 286
Huff AC, 193
Huffel CV, 636, 639, 641
Hughes AJ, 29
Hughes C, 650, 661, 663
Hughes MM, 126
Hughes P, 140
Hughes SH, 211
Hughes-Benzie RM, 460
Huh CG, 420
Hui D, 569
Huinink WWT, 552
Huisman T, 551
Hulette CM, 424
Hull MW, 183
Hull RA, 675, 679
Hull SI, 673, 675, 679
Hull SR, 595
Hulla W, 764
Hulsmann BB, 255
Humayun MZ, 201
Humbert JP, 772
Humbert S, 420
Humphreys MJ, 283
Humphries DE, 446, 452,
456, 462
Humphries MJ, 444

Hung SH, 283 Hunsaker LA, 286 Hunt JF, 649 Hunt SL, 392 Hunter T, 343, 354, 362-64, 417 Huppa JB, 614 Huppi K, 116 Hurley EA, 125 Hurley JB, 477 Hurlstone A, 264 Hurt E, 390 Hurt KJ, 771 Hurwitz J, 29, 34, 41, 140, 141, 145, 146, 199, 337, 339, 346, 347 Hussain I, 427 Hussain MM, 411 Hutchinson A, 555-57, 565, Hutchinson CR, 705, 707, 712, 720, 722, 730, 740, 747, 748 Hutchinson LK, 823, 827 Hutchison JE, 293, 294 Huttenhofer A, 10 Hutter M. 60 Hütter R. 723 Hüttinger M, 413 Hutzler M, 673 Huynh L, 529 Hwang C-C, 864, 869 Hwang HY, 461 Hyde P, 439 Hyde SC, 538, 553 Hyman BT, 423, 425 Hynes RO, 417 Hyrien O, 341, 355 Hyun WC, 289 I

Iacomini J, 110, 125 Iakhiaev A, 411 Ibarra-Molero B, 809 Ibata Y, 319 Ibdah M, 732 Ibrahimi OA, 439 Ichikawa K. 496 Ichinose K, 712, 741, 746 Ichinose N, 60 Ichinose S, 347, 348, 355 Ieiri I, 554 Ielpi L, 744 Igaki H, 358, 359 Igarashi J, 705 Ignatius MJ, 413 Iguchi R, 616 Iida K, 757, 774 Iijima H, 413 lizuka M. 340, 355 Ikawa S, 85 Ikeda H. 64, 705 Ikeda K. 36, 763 Ikeuchi Y, 481 Ikezu T, 427 Ikonen E, 427, 626 Ikura T, 758, 759, 763, 764, 798 Ilg T, 295 Illing M, 570 Imai Y. 605 Imaizumi K, 498 Imanari T, 453 Imbalzano AN, 126, 253, 265, 767 Imberty A, 440, 450, 685, 745 Imhof A, 248-50, 254-56, 258, 261, 262, 266 Imiya K, 448 Impagnatiello F, 416 Imperiali B, 616 Inaba T, 13 Inagaki M, 352 Inazu T, 616 Inesi G, 516 Infante V, 774 Inglese J, xxi Iniguez-Lluhi JA, xxi Inman RB, 29, 75, 77-79. 83, 85, 86, 88, 90, 92, 93 Inokuchi H. 168

Inoue H. 723

Inoue K, 554

Inoue Y. 860 Inouye ST, 312, 314, 318 Intine RV, 169, 377, 378, 384, 386, 395, 396 Inventi-Solari A, 741, 748 Inverso JA, 295 Iozzo RV, 436, 437, 457 Ip HS, 295 Ippolito JA, 486 Ireton GC, 838 Irie K. 348, 352 Irons M, 422 Irvine RF, 771 Isaacson RE, 704 Isakov VV, 732 Iserloh U, 619 Ishibashi S, 410, 411 Ishida A, 482, 487 Ishida M. 420 Ishida Y. 318 Ishiguro K, 119 Ishihara M, 452, 457 Ishii H, 32, 413 Ishii T. 377, 391 Ishikawa A, 119 Ishikawa K, 381 Ishikawa T, 33, 158, 557, 563, 577 Ishimi Y, 346-48, 352, 355, 362, 364 Ishitsuka R. 444 Ishizuka H, 563 Islam SA, 806, 807 Isobe T, 662 . Isoyama T, 377, 391 Itagaki Y. 563 Ito J, 23, 32, 41, 135, 136, 153 Ito K, 558, 559, 563, 566 Ito M, 478 Ito S. 554 Ito T, 250, 254, 255, 257, 572, 684 Ito Y, 85, 427, 625 Itoh K, 564 Itoh N. 439

Itoh Z. 704

Ittensohn M, 643

Itzhaki LS, 795, 796, 801, 802, 804
Ivanina T, xxi
Ivanova VS, 123
Ivens AC, 295
Ives EB, 772
Iwai S, 33, 35, 154, 155, 158
Iwasaki H, 23, 28, 33, 158
Iwasawa N, 703
Iyengar R, 496
Iyer VR, 250, 251, 775
Izquierdo MA, 560
Izumi M, 358, 360
Izumi S, 446, 460, 463

J

Jackman JE, 639, 641, 642, 652-55 Jackson A, 257 Jackson BM, 163, 251 Jackson DA, 341 Jackson MR, 614 Jackson NM, 68 Jackson PK, 342, 343, 351, 363 Jackson RJ, 392 Jackson RL, 439 Jackson SE, 793, 795, 809 Jackson SM, 460 Jackson SP, 121-23 Jacob M. 787, 792, 806 Jacobs MA, 32 Jacobs SA, 74, 84, 90 Jacobs T. 291 Jacobsen C, 412, 422 Jacobsen JR, 705, 747 Jacobsen L, 414, 531 Jacobson K, 626, 628 Jacobson MR, 177, 181, 183 Jacobson SJ, 758 Jacobsson I, 454, 457 Jacquemin E, 568, 569 Jacquier A, 837 Jacutin S. 202 Jaeger L, 176, 177 Jaenicke R, 785

Jaenisch R, 125

Jaffrézou J-P. 553 Jager D. 559 Jager KE, 653 Jagielo PJ, 655 Jahr C, 319 Jain SK, 78, 79, 85, 309 Jaju M, 200 Jakobs MA, 155 Jalkanen M, 436, 439, 454 Jallepalli PV, 342, 351, 364 Jambou R, 284, 285 James JA, 596 James MN, 283, 284 James PF, 514 James R, 797 Jamin M, 791 Jan YN, xxi Janel-Bintz R, 29 Janeway C Jr, 636, 639, 641 Janeway CA Jr. 639 Jang SB, 228 Jang YK, 256 Jankowski CK, 705 Janmey P, 769, 772, 773 Jann B, 678, 682 Jann K, 678, 682 Jannuzi A. 460 Jansa P. 255 Jansen G, 563 Jansen H, 548, 560 Jansen PLM, 544, 558, 562 Jansson P-E, 672, 684 Jantsch MF, 821 Jaouen M, 705 Jaquinod M, 64 Jares P, 361, 362, 364, 366 Jarrous N, 166, 167, 173, 179, 183 Jas GS, 785 Jaskelioff M, 258, 259, 262, 767

Jasko MV, 144

Javaid ZZ, 518

Jayanthi GP, 172

Jayasena VK, 909

Jaureguiberry G, 284, 285

Jaunin P. 519

Jeang K-T, 13, 384, 395 Jedani KE, 712 Jedlitschky G, 559, 561. 563, 565 Jefferson AB, 487 Jeffrey J. 716, 717 Jeffrey PD, 735 Jeggo PA, 121, 122 Jencks WP, 854, 872, 882, 903, 909 Jeng CJ, 483 Jeng K-S, 890 Jenkins KJ, 501 Jenkins NA, 477 Jennes L, 562 Jenness R, 709 Jennings EG, 251, 340 Jennings MP, 671, 672 Jennings PA, 794 Jensen FR, 869 Jensen JW, 454, 684 Jensen KF, 866, 869 Jensen R, 764 Jentoft N. 596 Jeon H, 407, 414 Jernigan RL, 79 Jeruzalmi D, 146, 343 Jewell EA, 514, 528 Jewell-Motz EA, 525 Jeyaretnam B, 653, 654 Jhappan C, 121 Ji JP, 199 Ji ZS, 411 Jiang C, 499 Jiang JQ, 735 Jiang JS, 223, 705, 746 Jiang N. 24 Jiang SP, 284 Jiang T, 178, 180 Jiang W, 343, 354, 362-64 Jiang XM, 712 Jiang Y. 141, 337 Jiang YW, 758, 763 Jick H, 427 Jick SS, 427 Jimenez MA, 798 Jin J, 253

Jean PA, 576

Jin SF, 122, 670 Jin XW, 310 Jin YH, 256 Jinks-Robertson S. 156 Jockusch BM, 757 Johansson A, 86 Johansson E, 32, 156 Johansson S, 436 John S. 763 Johne A, 554 Johnson AA, 147 Johnson CA, 257 Johnson CH, 308 Johnson CM, 787, 793, 807 Johnson DA, 705, 707, 711, 712, 714, 715 Johnson DI, 771 Johnson DR, 549, 560, 561 Johnson G, 574 Johnson JL, 231 Johnson KA, 139, 147, 208, 910 Johnson KG, 626 Johnson LD, 501 Johnson LF, 723 Johnson MK, 225, 228 Johnson RE, 20, 32-35, 38, 40, 41, 153-56 Johnson RP, 659 Johnson RS, 110, 125 Johnson TO, 284 Johnson WA, 445, 461 Johnson WW, 554 Johnston LA, 199 Johnston LH, 148 Johnston SH, 594 Johnstone RW, 553, 554 Joiner KA, 673 Jokela M, 141 Jolly CJ, 37 Jondro PD, 411, 415 Jones AJS, 615 Jones B. 257 Jones CR, 310 Jones D, 52, 56 Jones EG. 497 Jones JC, 550, 562

Jones JJ, 168

Jones KA, 249, 264 Jones ME, 861-64, 870, 871 Jones MH, 255 Jones PL, 257 Jones PM, 545 Jones SA, 579 Jones T, 319 Jong A, 342, 343, 363 Jongeneel CV, 41 Jonker JW, 556 Jonsson T, 794, 803 Jonsson ZO, 134, 141, 145, 146, 250 Jöonsson M. 448 Jordan F, 732 Jordan J. 227 Jørgensen BB, 227 Jorgensen JR, 512 Jorgensen PL, 512, 514, 523-25, 531 Jörnvall H, 709, 716, 717 Jortner J, 54, 55 Jose Ludecke H, 446 Joseph-McCarthy D, 710 Joshi PB, 295-97 Joshua-Tor L. 228 Joss L, 355 Jouin H. 279 Jovanovic SV, 54, 57 Joyce CM, 136, 199, 201, 572 Joveau R. 281 Ju DS, xxii Ju G. 641 Ju T. 602 Juan LJ, 767 Juang JL, 415 Juarez A, 661 Judice WAS, 294 Juguilon H, 315 Juliano L, 286, 288, 289 Juliano MA, 286, 288, 294 Jullien N. 378, 381, 383 Jungnickel B, 38 Junop MS, 123 Jürgens G, 639 Juvvadi P, 519, 525

Jwang B, 90

K Kaasik K, 309, 312, 317 Kaattari SL, 110 Kabalin MA, 519 Kabsch W, 229 Kadam S, 264 Kadam SK, 653, 669 Kadonaga JT, 249, 250, 254, 255, 257 Kadrmas JL, 642, 653, 654, 657, 665 Kaelin K. 831 Kaelin WG Jr, 363 Kagalwalla AF, 569 Kagami M, 381, 383 Kagan RM, 733 Kahan FM, 639, 642, 652 Kahler CM, 660, 671 Kahn BB, 531 Kahne D. 596 Kahne DE, 703 Kai M, 154 Kai N. 417 Kaibuchi K, 771 Kaiser BK, 363 Kaisho T, 641 Kakee A, 550 Kakiuchi S, 474 Kakunaga T. 777 Kakuta Y, 452, 453 . Kal AJ, 254, 264 Kala G. 562 Kala SV, 562 .Kale SB, 113, 118-20 Källman AM, 835, 837, 840 Kallo I, 319 Kalpana G, 890 Kalpaxis DL, 172 Kaltashov IA, 642, 643 Kamal A, 418, 419, 501 Kameshita I, 477, 487 Kamimura K, 446, 460, 463 Kamimura Y, 359, 360 Kaminski A, 392 Kaminski WE, 578 Kaminsky YG, 318, 322, 326

Kan YZ, 52, 56, 61 Kanaar R, 123, 149, 249, 250 Kanaki T, 414 Kanaseki T, 481 Kanda A, xxi Kanda S. 439 Kanda T. 358, 359 Kandel ER, 417, 425, 498 Kandels-Lewis S, 175 Kandels-Lewis SB Sr. 388 Kaneko K, 626 Kaneko M, 309, 311 Kang CY, 823, 830, 831 Kang H, xxii Kang J, 262 Kania SA, 297 Kanipes MI, 645 Kannouche P, 33, 34, 43, 154 Kano K. 63 Kantor D. 476 Kantor DB, xxii Kao L, 673 Kapfhammer D, 673 Kapiloff MS, 477, 483, 487, 488 Kapitonov D, 744 Kapitza T, 352, 353 Kaplan AP, 652 Kaplan BE, 214, 579 Kaplan HB, 661 KAPLAN JH, 511-35; 512, 513, 515, 516, 518, 519, 521-26, 530 Kaplan JM, 479 Kaplan MI, 124 Karabetsou N. 265 Karageorgos LE, 684 Karam JD, 199 Karbarz MJ, 645, 653, 654 Karbstein K, 903 Karcher A, 124, 545 Karczewski P, 477 Kardon JR, 905, 907 Karess RE, 295 Karibian D, 662 Karl KA, 417

Karl W, 731 Karlin S, 74, 80, 486, 653 Karlinsky JB, 452 Karlish SJD, 512, 514, 520, 522, 523, 528, 529 Karls U. 477 Karow M, 642, 643, 648, 650 Karp G, 440 Karpeisky A, 903 Karplus M, 803-7 Karran EH, 427 Kartenbeck J. 560, 562 Karunaratne DN, 653 Karwan R, 171, 181 Karwan RM, 171 Karwaski M-F, 672 Kashima T. 85 Kasmer C, 32, 38, 40, 158 Kassenbrock CK, 171 Kastelein RA, 639 Kasting JF, 227 Kastner B, 388, 389 Kasumoto R, 153 Katabami F, 325 Katayama T, 498 Kati WM, 876, 880 Kato K, 74 Kato M, 436, 437, 439, 444 Kato T. 21 Kato Y, 407, 414, 421, 562 Katoh T, 485, 488, 531 Katsikas MC, 296 Katsman M, 456 Katz A, 167, 173, 178 Katz JM, 289, 290 Katz L, 705 Katzenellenbogen K, 723 Kauer JA, 476 Kauffmann HM, 562 Kaufmann D, 579 Kaufmann G. 141 Kaushik N, 200 Kauzmann W, 785 Kawabe T, 559, 563 Kawahara K, 653 Kawai K, 60 Kawai T, 636, 639, 641

Kawakami J, 900, 904, 905 Kawakami K, 512 Kawamata T. 413 Kawamura H, 314 Kawamura K, 35 Kawamura M, 518, 519, 525 Kawano K, 564 Kawarabayasi Y, 412 Kawasaki S, 652 Kawasaki T, 448, 449 Kawasaki Y. 41, 147, 154, 348, 356-58, 360-62 Kay CM, 800 Kay J, 283, 284, 299 Kay LE, 800 Kay SA, 311 Kaya S, 531 Kayano E, 891 Kazakov S, 176 Ke Y. 439, 774 Kearns AE, 456 Kearsey SE, 348, 352, 364 Keasler SP, 673 Kedar P. 36 Kedes L. 777 Keefer JR, 487 Keegan LP, 819, 820, 822, 823, 825, 828, 829 Keene JD, 376-78, 381, 384, 392, 394, 395, 397, 399 Keenleyside WJ, 673, 674, 682, 684 Keesler GA, 310 Kehle J, 249, 250, 256-58, 261, 262 Keiser N. 437 Kekuda R. 167, 173 Keleti J, 723 Kelkar N, 419 Kellenberger E, 688 Kellenberger L, 736, 740 Kellendonk C, 311, 316 Keller P, 426, 427, 626 Keller RP, 551 Keller RW, 29, 74, 95 Keller U. 705 Keller W, 818-22, 835, 840

Kellermayer MS, 787 Keller-Schierlein W, 723 Kelley DE, 256 Kelley R, 336 Kelley SA, 68 Kellis JT Jr. 794 Kellman W, 426, 427 Kellum R, 339 Kelly BL, 295 Kelly JM, 286, 688 Kelly JW, 787, 803 Kelly MJ, 800 Kelly PT, 476, 484, 485, 487, 488, 497, 498, 500 Kelly RF, 688 Kelly TJ, 334, 337, 339, 342, 345, 351, 360, 362, 364, 366 Kelly TM, 641, 642, 653, 706, 735 Kelman Z, 138, 140, 141, 145, 199, 346 Kemp BE, 477, 479, 483, 484, 491 Kemp DS, 860, 882 Kemp S, 574 Kempf T, 444 Kempner ES, 457 Kenan D, 376, 378, 381 Kenan DJ, 376-78, 384, 391, 392, 395-97 Kendall A, 179, 183, 390 Kennedy AK, 116 Kennedy C, 319 Kennedy EP, 645 Kennedy JF, 702, 741, 747, 748 Kennedy MA, 29 Kennedy MB, 475-78, 483. 485, 487, 497-500 Kennedy NJ, 419 Kennison JA, 257, 761, 774, 775 Kent NA, 265 Kent SBH, 609, 611, 625 Kentsis A, 809

Kenyon GL, 295

261, 262, 264, 265,

Keppler D, 558, 560-65, 577	Kilduff TS, 315	261, 262, 264
Keranen S, 144, 147	Kilesso VA, 687	268, 767, 768. Kino K, 64
Kerbeshian MC, 313, 314,	Kilpeläinen I, 644	***
318	Kim B, 200	Kinoshita K, 40
Kerjaschki D, 412	Kim BJ, 863, 865	Kinoshita S, 562 Kinoshita T, 628
Kern J, 242	Kim BT, 449, 450	Kinoshita-Toyoda
Kershaw JK, 722	Kim C-H, 232	448, 450, 462
Kersten S, 577, 578	Kim DE, 796, 807	
Kerwin RW, 828	Kim DF, 908	Kinsland C, 865, 8
Keshvara L, 413, 416-18,	Kim DH, 413	Kinter MT, 40
425	Kim DR, 112, 120	Kioka N, 547
Kessler A, 679		Kioschis P, 574
Kessler AC, 712	Kim JI, 75, 78, 85, 86, 228,	Kipp H, 576
Kesti T, 144, 147	230, 257, 735 V: V 284 644 647 648	Kirby AJ, 860
Kettner C, 281	Kim K, 284, 644, 647, 648	Kirby M, 253, 262
Kevil C, 453	Kim MG, 79	761, 768
Khaira P, 336, 337, 339,	Kim PS, 784, 799	Kirch SA, 111, 120
	Kim RB, 550, 569	Kirchgessner CU,
341, 353 Khamlishi AA 22	Kim SA, 482, 487	Kirchhausen T, 769
Khamlichi AA, 32	Kim SD, 388	Kirchhoff LV, 295
Khan B, 352	Kim SG, 319	Kirikae T, 636, 639
Khan KM, 428	Kim S-J, 36, 37	Kirillov A, 125
Khan SA, 643	Kim S-M, 9, 31, 334	Kirkpatrick PN, 72
Khangulov SV, 11, 12	Kim S-R, 23, 31	Kirkwood A, 476
Kharrat A, 835	Kim ST, 66	Kirkwood S, 709
Khavari PA, 758, 759, 761,	Kim U, 818, 820, 834–36,	Kirley TL, 516, 51
767, 775	839, 840	Kirsch IR, 106
Khillan J, 825	Kim YG, 821	Kirschner MW, 35
Khodjakov A, 556	Kimata K, 444, 454, 456,	Kirschning A, 705,
Khodursky A, 20	457	Kirsebom LA, 177
Khoo CY, 345	Kimberly WT, 425	Kirst HA, 704
Khorana HG, 529	Kimura H, 35, 347, 348,	Kiser CS, 446, 450
Khorasanizadeh S, 799	355, 413	Kisker C, 147, 228
Khorosheva EM, 483	Kimura JH, 436, 456	Kiss T, 181
Khosla C, 705, 747	Kimura T, 715	Kissinger M, 758,
Khosla M, 910	Kimura Y, 550	Kita T, 410
Khoury SJ, 554	Kinal HH, 84	Kitabatake M, 168
Khrestchatisky M, 827	Kindelberger DW, 166, 168,	Kitada K, 362
Kido N, 682	169, 175, 176, 178,	Kitagawa H, 447-5
Kiefer JR, 211	179, 384, 395	Kitamura K, 36
Kieffer JD, 10	Kindl PK, 731	Kitani T, 482
Kiefhaber T, 803	Kindle KL, xviii	Kiuchi Y, 577
Kierzek R, 214, 910	Kinev A, 253	Kjellén L, 436, 431
Kihara H, 798	King DP, 308, 309	451-53, 459
Kihara M, 361, 362	King DS, 598, 605, 608, 611	Kjems J, 821, 841
Kihlberg J, 623	King MM, 483, 488	Klaassen CD, 576
Kikuno P 381	Vinceton DE 126 249 60	VI CHW 61

Kingston RE, 126, 248-50,

252-54, 256, 258, 259,

Kikuno R, 381

Kikyo N, 250, 254-56, 258

268, 767, 768, 774 o K, 64 oshita K, 40 oshita S, 562 oshita T, 628 oshita-Toyoda A, 445, 448, 450, 462 sland C, 865, 866, 869 er MT, 40 ka N, 547 schis P, 574 p H, 576 y AJ, 860 y M, 253, 262, 264, 761, 768 h SA, 111, 126 hgessner CU, 121, 123 hhausen T, 769 hhoff LV, 295 kae T, 636, 639 llov A. 125 patrick PN, 722 wood A, 476 wood S, 709 ey TL, 516, 519 ch IR, 106 schner MW, 353 schning A, 705, 707, 711 ebom LA, 177 t HA, 704 er CS, 446, 450 ter C, 147, 228, 232 T, 181 inger M, 758, 761, 775 T, 410 batake M, 168 da K, 362 gawa H, 447-50, 457 mura K, 36 ni T, 482 chi Y, 577 llén L, 436, 437, 439, 451-53, 459

Klaassen CHW, 519

Klaffke W, 728

Ko J. 420

Klar E. 563 Kleanthous C, 791, 797 Kleckner N, 80, 116 Klee C. 474 Klee SR, 681 Kleesiek K, 444 Kleiger G, 257 Klein DC, 308 Klein HL, 295 Klein U, 32, 155 Klein-Szanto AJP, 565 Kleinewietfeld M. 107 KLEMBA M, 275-305; 283, 284, 299 Klemm RD, 338, 349 Klena JD, 636, 661, 663, 665, 666, 669, 670, 675, 676, 678 Klimov DK, 803, 804 Klinder A, 283 Kline L, 172 Klingenberg M, 707 Klinman NR, 40 Klix N. 37 Klochendler-Yeivin A, 776 Klose KE, 673 Kloser AW, 661 Kloss B, 310 Klotz E, 107 Klucken J, 572, 578 Klug A, 895, 900 Knapp D, 339, 341, 353 Kneidinger B, 665, 666 Kneitz B, 40 Knezevic J. 21, 22 Knickerbocker A, 284 Knight KL, 83, 84 Knijff R, 378, 395 Knippers R, 28, 339, 340, 348, 353 Knirel YA, 672 Knisely AS, 569 Knitt DS, 910 Knoepfler PS, 256 Knoppers MH, 614 Knott TJ, 818 Knowlton JR, 290

Knudson AG Jr. 776

Kobayashi GS, 705 Kobayashi H, 682 Kobayashi M, 455 Kobayashi R, 250, 254, 255, 257, 349 Kobayashi T, 68, 487 Kobe B, 483 Kochetkov NK, 619, 672 Kocoshis SA, 569 Kocsis B, 665 Kodadek T. 74 Kodama T, 406 Koduru SB, 377, 384, 386, 396 Koeller KM, 595, 600, 604 Koenderink JB, 523, 525 Koepf EK, 787, 803 Koga M, 564 Kogan G, 675 Koh DS, 826 Köhler AK, 54-58 Kohler M, 823, 826, 827 Kohlhagen G, 555, 556 Kohmura N, 417 Koike K. 563 Koipally J, 257 Koizumi M, 889 Kojima K, 444 Kojro E, 426, 427 Kok J, 545 Kokenyesi R. 436, 437 Kokubun S, xxi Kol O, 688 Kolár C. 598 Kolakovich KA, 285, 286 Kolakowski LF Jr, 312 Kolb SJ, 482, 498 Kolchanov NA, 38, 40 Kolker DE, 321, 327 Koller T, 77, 86 Kolli BK, 296 Kollman PA, 785, 804, 865, 869 Kolodner RD, 29, 41, 148 Kolodziej SJ, 479, 481, 489 Kolter R. 661 Komamura Y, 346

352 Komatsu H, 703 Kometiani P, 531 Komine Y, 168 Komiya H, 228 Komori A, 32, 39, 40, 158 Komori T. 107 Kondo T, 308, 448 Kondrashova MN, 318, 322, 326 Kondratick CM, 20, 32-34, 153, 154 Konforti BB, 86, 92 Kong D, 337, 339 Kong Q, 39 Kong X-P, 145, 146 König J, 558, 560, 562-64, 577 König P, 557 Konings WN, 544, 545, 547 Konopka RJ, 309 Kontrohr T, 665 KOOL ET, 191-219; 194, 195, 201, 202, 208, 209, 212, 214, 215 Kool M, 548, 556, 557, 560-64, 566 Koomen G-J, 556 Koonin EV, 32, 34, 35, 119, 341 Koop R, 254, 257 Kooperberg C, 265 Koopman FJ, 552 Köplin R, 636, 669, 679, 683 Koppler P, 772 Kornack DR, 426 Kornberg A, 23, 561 Kornberg RD, 248, 249, 251, 252, 258, 259, 268, 758, 759, 764, 766, 768, 769 Kornbluth S. 363 Korneluk RG, 384, 392, 393 Kornfeld R, 611 Komfeld S, 611 Kornhauser JM, 309

Komamura-Kohno Y. 346.

Kornmann B, 312, 313, 316, 317, 321, 326 Kornuc JJ, 228 Korolev S, 211 Koronakis V, 650, 663 Kortemme T, 800 Kortschak RD, 251 Kos A, 831 Kosenko EA, 318, 322, 326 Koshishi I, 453 Koshland D, 35 Koshy TI, 450, 451 Kosik KS, 498 Kosik LM, 413 Kosma P, 662, 665, 666 Kost H, 531 Koster JC, 519, 523, 525 Kouike H. 249 Kounnas MZ, 411, 422, 424, 425 Kouzu Y, 312 Kovacs DM, 424 Kowal RC, 411 Kowalczykowski SC, 25, 72, 74-79, 83-88, 92 Kowalewski T, 121 Kowenz-Leutz E, 264 Koyama H, 151 Koyasu S, 757 Kozarich JW, 703 Kraemer B, 180 Kraemer KH, 32, 38, 40, 158 Krafte KS, xx Kragelund BB, 809 Krainer AR, 379 Kraiss A, 673 Krajewska-Pietrasik D, 675 Kramer ER, 343 Kramer L, 290 Kramer PJ, 705 Kramers HA, 792 Krangel MS, 125 Krantz BA, 792, 809 Krasnow MA, 463 Krauß N, 242 Kraulis PJ, 223 Krause EG, 477

Krause S. 818 Kraut J, 138, 150, 211, 215 Kravchenko V, 653 Krayevsky AA, 144 Kraynov VS, 200, 213 Krebs EG, 503 Krebs JE, 248, 251, 267, 764 Kreidberg JA, 417 Kreiman G, 499 Kreitz S, 339, 340, 353 Kremmer E, 337, 341, 349 Kresse H, 445, 448 Kreuger J, 439, 444 Kreuzer KN, 20, 29, 31, 35, 41, 72 Krezel AM, 398 Krieger M, 406, 410 Kriegstein HJ, 355 Krishna NR, 449 Krishna TSR, 145 Krishnan S, 445 Kristel PM, 552 Kristensen O, 793, 803 Kristensen T, 411 Kristiansen K. 809 Kroemer HK, 562 Kroenke CD, 789 Krogmann T, 555, 556 Kroin JS, 561 Kroll ES, 35 Krook M, 709 Kropinski AM, 685, 688 Kroth I, 29 Krueger J, 644, 647, 648 Krueger RC Jr. 445 Krugh TR, 194, 212 Kruh GD, 557, 563-66 Kruijtzer CMF, 551 Krummel DAP, 177 Krupp RA, 75-78, 86 Krushel LA, 498 Krutchinsky A, 289, 290 Krystal GW, 477 Krzycki JA, 6 Kuan CY, 419 Kubista M, 77, 86 Kubo Y, xxi

Kubota Y, 151, 345, 496 Kuchler K. 544 Kuchta RD, 140, 208 Kuduk SD, 596, 598, 600, Kuenzle CC, 150 Kuettner KE, 456 Kufel J, 177, 376, 377, 384, 386, 387, 394 Kuge S, 377, 391 Kuhl DE, 319, 425 Kuhl M, 421 Kühn R, 150 Kuhlman B, 789, 807 Kuhlmann J, 628 Kuhn H-M, 673 Kuhn J, 444 Kuhn K, 628 Kuhn U. 397 Kuipers F, 572, 575, 579 Kukimoto I, 358, 359 Kula M-R, 728 Kulesza P. 122 Külgen C, 550 Kulkarni AB, 420 Kullak-Ublick GA, 576, 579 Kulowski K, 739, 740 Kulpa CF Jr. 688 Kulshin VA, 653 Kumagai H, 366 Kumar A, 138, 150, 215 Kumar KA, 79 Kumar M, 236, 823, 830, 831, 833 Kumar PKR, 891, 895, 898, 904, 905 Kumar S, 62, 379, 615 Kume K, 309, 563, 566 Kume S, 523, 524 Kuner T. 826 Kung H-F, 7 Kung H-J, xvii Kunkel TA, 20, 28, 31-33, 36, 38, 39, 144, 153, 154, 158, 198-201, 210, 213 Kunstmann MP, 723 Kuntzweiler T, 512, 515

Kuntzweiler TA, 523 Kunz F. 7 Kunz H. 595 Künzel E, 741 Kuo A, 758, 760, 776 Kuo MH, 267, 764 Kuo MY-P. 832, 890, 895, 898 Kuppers R, 38 Kuret J, 475, 485, 488 Kurilla MG, 376, 394, 395 Kurima K, 445 Kurimasa A. 121 Kuriyan J, 145, 146, 343, 481, 485, 492 Kurochkin AV, 176 Kuroda S, 771 Kuroda Y. 798 Kursula I, 141 Kurumizaka H, 85, 86 Kurz JC, 166, 168, 170, 899 Kurzchalia TV, 626 Kusch D, 52, 54 Kusche M, 453, 455 Kusche-Gullberg M, 437, 449, 450, 452-54 Kusmierek JT. 193 Kusomoto R. 154 Kuss BJ, 566 Kusuhara H, 544, 550 Kusumoto R, 20, 32, 33, 35, 153 Kusumoto S, 639, 642 Kusunoki J, 414 Kutach AK, 250, 254, 255 Kute TE, 444 Kuwajima K, 799 Kuzminov A, 24, 25, 27, 72 · Kuzushima K, 343 Kwee L. 641 Kwiatkowski AP, 477, 483, 488 Kwon H, 376, 377, 379, 381, 383, 767 Kwon J, 13, 126, 250, 268 Kwon YT, 420 Kyriacou CP, 309, 479

L Labib K, 345, 348, 352, 359 Labow M, 641 Labriola C. 286 Lacomis L, 252, 758, 766 Lacourciere GM, 9, 12 Lacroix E, 800, 801 Ladam P. 705 Ladurner AG, 806 Lafaille JJ, 107 Lafleur DW, 255 Lafontaine DA, 903 Lafontaine DL, 376, 377. 384, 386, 394 Lagally MG, 124 Lager PJ, 399 Lai F, 819, 820, 835, 840 Lai MMC, 890, 895, 898 Lai Y, 482, 485, 487, 488, 497, 498 Laird NM, 424 Laissue JA, 551 Lalani E, 32, 155 Lalmanach G, 286-89 Lam JS, 659, 662, 667, 670, 673, 675, 679, 682, 685, 688, 736 Lam K-P, 110 Lam P. 547, 570 Lam TL, 679 La Mantia C, 253, 776 Lambert G. 572 Lambert J, 609 Lambert de Rouvroit C, 413, Lammich S, 426, 427 Lampel KA, 673 Lancaster JE, 723 Lanciotti J, 452 Landel CC, 255, 259, 260, 262 Lander AD, 444, 450 Lander PA, 561 Landesman PW, 874, 880

Landis G, 336

Landmann L, 566, 569

Landree MA, 113, 118-21

Landsman D, 168 Landwojtowicz E, 549 Lane LK, 518 Lane PJL, 36 Lane WS, 166, 167, 173, 175, 178, 254, 255, 602, 758 Lang BF, 175 Lang C, 736 Lange J, 253, 776 Langenbacher T, 54, 55 Langer T, 539 Langerak AW, 126 Langley DR, 703 Langmann T, 544, 572, 578 Längst G, 249, 250, 254-56, 258, 261, 262, 758, 767 Lanier LM, 415, 417, 421 Lankas GR, 551, 554, 555 Lankelma J, 552, 559 Lanzilotta WN, 228, 232, 233 Lapidus LJ, 785 Lapinski PE, 546 LaPolla RJ, xx Lardeux B, 576 Large SL, 720, 728 Lariviere L, 639 Larkin DW, 309, 310 Laroche L. 661 LaRosa SP, 639, 641 Larsen B, 427 Larsen S, 866, 869 Larson JL, 728, 733, 740 Larson K, 194 Larson T. 37 Larsson E, 437 Larsson H, 439, 444 Laskey RA, 336, 339, 345, 353, 364, 767 Lasky LA, 605 Laterre PF, 639, 641 Lathrop W, 413 Lattman EE, 756 Lau HK, 447 Lauder SD, 25 Laugaâ P. 892 Laugier D, 823, 831

Laurent BC, 251, 758, 764
Laurent G, 553
Laurents DV, 791, 797, 808
Lauri G, 284
Lauriano CM, 673
Lavery DJ, 308, 317
Lavialle M, 318
Lavrik OI, 36
Lawlis SJ, 339, 343, 354,
363
Lawrence CW, 24, 32, 33,
40, 151, 155
Lawrence NA, 144
Lawrence R, 446, 455, 458,
459
Lawson AM, 453, 595
Lawson DM, 228, 283
Lawton P, 280
Lazaridis T, 803, 804
Lazinski DW, 833, 836, 891
Le T, 643
Leach DR, 124
Leadlay PF, 720, 722, 730,
736, 737, 740
Leake B, 550
Learned RM, 578
Leatherbarrow RJ, 794
Leatherwood J, 351, 352,
363, 364 Leavitt J, 777
Leavitt J, 777
Le Beau M, 123
Leber J, 349
LeBlanc GA, 549
Le Bonniec S, 298
Lebwohl MG, 567
Lech M, 446, 455, 458
Lechner J, 611
LeClerc JE, 24
Lecureur V, 569, 578
Ledin J, 446, 463
Ledman DW, 166, 176, 177
Ledo F, 772
Leduc Y, 446, 450
Lee AA, 685
Lee AI, 103
Lee AY, 283, 284
Lee B, 446
Lee C, 183
Dec 6, 103

Lee CC, 312
Lee CE, 284
Lee CH, 264
Lee D, 337
Lee DG, 338, 367
Lee EY, 124
Lee FEH, 107
Lee GK, 285
Lee H-I, 231
Lee HS, 377, 379, 381, 384,
391, 393, 396, 397
Lee JC, 475, 787
Lee JK, 337, 339, 346, 347,
863, 865, 866
Lee JM, 563, 577
Lee J-S, 264, 553, 554
Lee JY, 166, 167, 169, 170,
173, 175, 176, 178,
384, 395
Lee K, 514, 565
Lee MH, 573
Lee MR, 785, 804
Lee MY, 140, 141
Lee PL, 31
Lee SJ, 712
Lee S-R, 13, 407
Lee TI, 251
Lee T-S, 865, 869
Lee VM, 424
Lee WC, 461
Lee Y, 122, 166, 167, 169,
. 173, 175, 176, 178,
384, 395 Leech JH, 284
Leem SH, 147, 359, 360
Leemans R, 822 Lees E, 253, 776
Lees-Miller SP, 122
Lefauconnier J-M, 550
Legault P, 903
Legrain P, 388
Legrand P, 233–35
Legrand R, 736
Leheste JR, 422
Lehman AR, 32, 38, 40, 158
Lehman IR, 77, 86
Lehman J, 708
Lehman MN, 315, 316
A. S.

Lehmann AR, 33, 34, 43, 151, 154 Lehmann KA, 821, 835, 837 Lehne G. 552 Lehner CF, 378 Lehr R, 168 Lehtonen S, 141 Lei M, 348, 356, 357, 361, 362 Lei Y, 711, 712, 716 Lei YY, 712 Leichtman AB, 579 Leier I, 558, 559, 561-63 Leigh GJ, 231 Leinfelder W, 10, 12 Leippe M, 291 Leive L, 688 Lejbkowicz F, 377, 384, 391 Lemaire M, 550 Lemaitre JM, 347 Lemas MV, 516, 529 Lemeur M, 107 Lemieux GA, 605, 621 Le Minh N, 312, 313, 316, 317, 321, 326 Le Minor L, 673, 674 Lemon BJ, 228, 233-35 Lemon KP, 42, 358 Lenarcic B, 286 Lengyel I, 486 Lengyel P, 819 Lenox AL, 652, 653 Lenting PJ, 411 Lenzi GL, 319 Leon A, 140, 141 Leonard AS, 487, 501, 503 Leonard NJ, 197 Leone C, 447 Leonetti F, 287 Leong SR, 639 Leonhard K, 539 Leppanen A, 602 Lerner MR, 376, 377, 388, 389, 394 LeRoy G, 254, 255, 758 LeSauter J, 315, 316 Le Saux O, 567 Lescure F, 892

Lastia FM 544 550 550
Leslie EM, 544, 558, 559, 561
Lesniak J, 735
Lessor RA, 197
Lestavel S, 578
LeStourgeon WM, 398
Letcher AJ, 771
Leteux C, 453
Letsinger RL, 52, 54, 55
Leu FP, 145, 146
Leu TM, 112
Leuschner U, 560
Leussing DL, 861
Leutz A, 249, 264
Levade T, 553
Levenson R, 514
Levenstein ME, 250, 254, 255
Leveque G, 639
Levery SB, 448
Levi M, 626
Levin JC, 671
Levine AS, 33
LeVine H, 483, 485
Levine HL, 864, 874
Levine RL, 13, 35
Levison BS, 870
Levy DL, 141
Levy ER, 413, 415, 427
Levy SB, 561
Levy Y, 40
Lewendon A, 663
Lewis FD, 52, 54, 55
Lewis SM, 103, 105, 107,
108
Ley HL 3rd, 836
Ley SV, 626
Ley-han A, 864
Li AC, 290, 353, 354, 639,
794, 804
Li CJ, 339, 340, 355
Li E, 292, 420
Li F, 596
Li JJ, 337, 348, 349, 351, 352, 354, 362, 364,
531, 614, 655, 672
Li JP, 454
Li K, 181
L. A. 101

Li L, 215, 573, 577
Li M, 461
Li PW, 594
Li WD, 289
Li XQ, 170, 172, 179, 309,
378, 383
Li X-S, 562, 641
Li Y, 141, 178, 210, 211,
252, 421, 758, 766, 910
Li YF, 890
Li YH, 410, 423, 427
Li Z, 121
Li ZD, 32, 39, 40, 158
Li ZF, 74
Li ZH, 376, 381
Li ZQ, 155
Li ZY, 122
Lian LB, 253
Liang C, 342, 344, 363
Liang R, 596
Liao PC, 148
Liao T, 707
Liao Z, 626
Liau G, 425
Libchaber A, 77
Liberi G, 147
Lickteig R, 485
Lidholt K, 446, 450, 451,
457
Lidstrom ME, 242
Lieber MR, 105-7, 113, 119.
121-23, 125
Lieberman KR, 908
Liebisch G, 572
Lieder KW, 724
Liehl E, 659
Lien E, 639, 642
Lienhard GE, 852, 860, 882
Ligon AH, 339
Ligtenberg MJL, 595
Likhosherstov LM, 619
Lilie H, 785
Liljas A, 717
Lilley DM, 903
Lim IA, 487, 501, 503
Lim KB, 644, 645, 647, 648.
653
Lima APCA, 286, 288, 289

Lima APCD, 287 Limoli CL, 43, 154 Lin CR, 477 Lin CS, 777 Lin DS, 573 Lin DW, 223 Lin F-P, 890, 895, 898 Lin H, 461 Lin M, 579 Lin SH, 642-45, 647, 648, 653-55, 667 Lin W-C, 124 Lin WS, 32, 155 Lin X, 446, 450, 460, 462 Lin XH, 445, 446, 460-62 Lin Y-J, 890, 895, 898 Lin ZP, 549, 560, 561 Lincecum J, 461 Lind T, 450, 457 Lindahl B, 437, 456 Lindahl L, 167, 173, 175, 178, 180-82 Lindahl T, 122, 148 Lindahl U, 436, 437, 439, 440, 443, 444, 451-56, 459 Lindberg AA, 676, 685 Lindberg B, 706, 731 Lindberg U, 757 Lindemann U, 56 Lindenau J, 560 Lindley PF, 238 Lindner B, 636, 645, 652, 653 Lindow S, 446 Lindquist LC, 708 Lindqvist L, 676 Lindsley JE, 78 Lindstrom DL, 363 Ling H, 20 Ling V, 547, 553, 569 Lingner J, 378, 381, 383, 389, 390 Lingquist Y, 732 Lingrel JB, 512, 514, 515, 523, 525, 526, 528 Linial ML, 823, 830, 831 Link WA, 772

Lin-Marq N, 376, 377, 381, 384, 390, 391, 393 Linn H. 415 Linn S, 141 Linnertz H. 531 Linton D, 672 Linton KJ, 545, 546 Lintzel J. 414 Lipford JR, 249, 345, 348, 355 Lipkin E, 707-9 Lipkowitz S, 106 Lipmann F, 857, 882 Lipp HP, 425 Lippard SJ, 222 Lipshitz HD, 499 Lisanti MP, 427 Lisitsina NM, 412 Lisitsyn NA, 412 Lisman J, 476, 496 Lisman JE, 476, 503 Litman GW, 106 Litman T, 555, 556 Litvinov SV, 595 Liu A, 419 Liu B, 421 Liu C, 311, 407, 414, 421, 703 Liu CX, 412 Liu D, 202, 675, 676, 678, 681 Liu G, 421, 519, 525, 564 Liu GQ, 519 Liu H, 253, 262, 264, 761, 768 LIU H-W, 701-54; 705-7, 709-12, 714, 715, 720, 731, 737, 738 Liu J, 54, 55, 200, 213, 283, 342, 444, 446, 455, 457-59, 463, 531

Liu JA, 437, 455

Liu L, 140, 141

Liu L-D, 709, 712, 714

Liu MH, 177, 180, 182

Liu MY, 636, 639, 641

Liu JQ, 195

Liu R, 253, 262, 264, 547, 549, 761, 768 Liu SC, 298 Liu S-Y, 13 Liu T-Y, 652 Liu X, 54, 55, 296, 571 Liu XB, 497 Liu XQ, 425 Liu YJ, 36, 820 Livak F, 109 Live DH, 596, 600, 619, 621 Livnah O, 732 Livneh Z, 21-25, 154 Lleonart M. 764 Lloyd RG, 29, 74, 93 Lloyd SJ, 482 Lo SF, 706, 707, 711, 712, 720 Loakes D, 195 Lobaccaro JA, 573, 577 Lobo AM, xxii LoBrutto R, 715, 725 Loe DW, 547, 558, 561, 562 Loeb LA, 199-201, 216 Loechler EL, 194 Loetscher H, 283, 284 Logan KM, 83 Logie C, 249, 250, 258, 259, 261, 262, 264, 767 Lohe AR, 115 Lohler J, 477, 499, 500 Lohman MCP, 561 . Lohman PH, 32 Lohmander LS, 456 Lohusen T, 555, 556 Lombardo M-J, 31 Lombó F, 741 Lomeli H, 823, 826, 827, 833, 834 Lomovskaya N, 739, 740, 748 Lomvardas S, 266, 267 Lonberg N, 85 London E, 568 Long AM, 211 Long DM, 898, 899 Long KS, 377, 381, 386, 394, 396

Longenecker G, 420 Longhurst TJ, 566 Longley MJ, 36, 147, 149, Longneckker R, 626 Lonnberg H, 890, 906 Lönngren J, 684 Lonsdale-Eccles JD, 281 Loo AK, 412 Loo BM, 439 Loo TW, 545-47 Lopes M. 147 Lopes MBS, 413 Lopez L, 614 Lopez MM, 485, 769 Lopez RA, 264 Lopez de Saro FJ, 41 Lopez-Fernandez LA, 156 Lopez-Girona A, 351, 364 Lopez-Molina L, 317 Loppnow H, 639 LoPresti MB, 85 Lorch Y, 248, 249, 252, 258, 259, 268, 758, 766, 768 Loreni F, 384, 393 Loria A. 166, 168, 176 Lorico A. 559-62 Lorico AL, 559 Loros JJ, 308 Lortat-Jacob H, 444 Losee-Olson S, 321, 327 Losey HC, 743 Losick R, 687, 688 Lothstein L, 705 Lotti F, 393 Lou F, 342, 363 Lou LL, 482, 487, 488 Lou X, 415 Lou YC, 171 Loubens I, 670 Loukinova EB, 422 Love JM, 672 Lovinger DM, 501 Low E, 866 Low KB, 643 Lowe DJ, 227, 231, 232 Lowe LG, 64

Lowell JE, 758 Lowenhaupt K, 819 Lown KS, 579 Lowndes NF, 123, 148 Lowrey PL, 309, 310, 312 Loyola A, 254, 255 Lozano F, 37 Lozovskaya ER, 115 Lu C, 21, 23, 24 Lu HG, 296 Lu JF, 574 Lu KL, 573 Lu M, 498 Lu P, 113 Lu TT, 651 Lu WQ, 309, 312, 317 Lu XD, 857, 882 Lucas I, 341 Lucca C, 147 Lucchini G, 147, 148 Luciani MF, 571, 572 Ludden PW, 236, 237, 243 Lüderitz O, 639 Ludwig L, 121 Lugemwa FN, 446, 450 Lugowski C, 723 Lugtenberg D, 167, 173, 183 Luhrmann R, 387-89 Luk A. 775 Lukas J, 351, 354, 363, 364 Luker GD, 554 Luker KE, 284 Lum BL, 552, 553 Luna EJ, 773 Lund AH, 414 Lund E, 377, 384, 388, 389, 394, 395 Lundblad V, 35 Lunderius C, 446, 452, 462 Lundin L, 439 Luneva NP, 52, 54 Lung F-DT, 596 Luo G, 123 Luo GX, 831 Luo HR, 771 Luo J. 444 Luo X, 771

Luo Y, 808 Lupták A, 902, 906, 907 LUSETTI SL, 71-100 Lustig F, 444 Luthey-Schulten Z, 796, 803, 804 Lutjohann D, 426, 427, 573 Lutkenhaus J, 642 Lutsenko S, 513, 516, 518, 519, 524 Ly HD, 668 Lygerou Z, 167, 173, 175, 181, 183, 344, 349, 354 Lyon JA, 298 Lyon M, 437, 444, 453, 454, 463 Lyu RM, 525 Lüderitz O, 723 M

Ma DD, 253, 776 Ma L, 769 Ma N. 84 Maas S, 819, 820, 822, 825, 826, 829, 835, 840 Maaskant JJ, 671 Maccarana M, 437, 439, 444, 454 MacFarland KJ, 86, 88, 90 Macher I, 642 Machida Y, 336, 337, 339, 341, 353 Macias M, 798 Macias MJ, 835 MacKay JF, 124 MacKenzie A; 460 MacKenzie HB, 566 MacKenzie KI, 579

MacLaren DM, 659
MacLean LL, 673, 674, 684, 685, 688
MacLennan DH, 518, 524, 526
MacLennan IC, 36

Mackie JE, 557

Mackman N, 641

MacLachlan PR, 669

MacNaughton TB, 890 MacNeill SA, 140, 145 MacNicol M. 487 MacPherson DF, 678 Macville M, 146 Madduri K, 741, 748 Maden BE, 908 Mader MM, 852, 882 Madigan MT, 703 Madine MA, 336, 339, 345. 352, 353, 363, 364 Madison DV, xxii Madison EL, 411 Madon J. 566, 569, 576 Madore SJ, 388 Madsen P, 414 Maenhaut-Michel G, 31 Maestre N, 553 MAGA G, 133-63; 141, 144 - 46Magara F, 419 Magdaleno S, 417, 418 Magistretti PJ, 319, 320 Magnusson OT, 725 Mahan MJ, 685 Mahbubani HM, 341, 345, 348 Maher VM, 32, 155 Mahley RW, 411, 413, 424, 425 Mahmoudi T, 254, 264 Mahommoud YA, 512 Mahony D, 253, 776 Mahowald AP, 407 Mahrus S, 287 Mahtani MM, 445 Maier P. 283, 284 Maine GT, 356 Maini RN, 377

Maiorano D, 344, 347, 349,

353, 354

Majerus PW, 772

Maiser S, 739

Maizels N. 39

Majer P, 283

Majima T, 60

Macmillan D, 611, 623

Mäkelä PH, 673, 676, 685,
687
Makhatadze Gl, 485
Makhov AM, 92, 93, 338
Maki S, 147
Makiniemi M, 140
Makino S, 890, 895, 898
Makino Y, 563
Makishima M, 578
Makker SP, 415
Makoff AJ, 828
Malenka RC, 476
Malhotra A, 176
Malhotra K, 66
Maliepaard M, 555, 556
Malik S, 111
Malingré MM, 551, 552
Malinow R, 476, 484
Malkas L, 141
Malkov VA, 79, 84
Maller JL, 361
Malo D, 661
Maloney L, 903
Maltseva T, 177
Malviya AN, 772
Mamat U, 636, 639
Mandel SJ, 10
Mandel U, 448
Mandelkow E, 420, 424
Mandelkow EM, 420, 424
Mandon E, 457
Mandrant-Berthelot M-A, 9,
10, 12
Mangelsdorf DJ, 578, 651
Mani K, 448
Maniatis T, 266, 267, 376,
835
Mankin AS, 908
Mann DM, 447
Mann H, 167, 173, 179, 183
Mann M, 255, 381, 396, 758
Manning JE, 289, 290
Manning NO, 223
Manning PA, 673, 678, 679,
684, 687, 712
Manno S, 298
Mannu F, 297
Manouvrier S, 569
The same of the same

Mäkelä PH 673 676 685

Mansilla-Soto J, 107, 118 Mansouri K, 739 Mansuy D, 705 Manting EH, 683 Mantsala P. 722 Manzoli FA, 771 Mao BY, 421 Mao C, 211 Mao JH, 421 Mao Q, 544, 558, 561 Maor-Shoshani A, 21, 23, 24 Maoulida C, 281 Marahiel MA, 705 Maraia RJ, 169, 376-79, 381, 384, 386, 390, 395-99 Marcacci L, 311, 315-17 MARCAURELLE LA, 593-634; 595, 605, 608, 609, 621 Marchand DH, 576 Marchant EG, 315 Marchetti MA, 376, 377, 379, 381, 383 Marcil M. 572 Marcum JA, 440 Marcus RA, 55 Marcus RN, 225 Marecek J. 531 Margelot K, 183, 377, 389 Margolis B, 411, 414, 415, 419, 421, 425, 427 Margolis RK, 437 Margolis RU, 437 Margolles A, 547 Margueron R, 317 Marguet D, 572 Marians KJ, 20, 29, 31, 35, 72, 74 Maric C. 355 Marini F, 32, 147, 155, 772 Marinoni F, 343 Markham P. 549 Markham PN, 549 Marlar CA, 342, 343, 363 Marolda CL, 663, 665, 666, 676, 678, 689 Marqusee S, 799

Marr J. 363 Marsden AFA, 736 Marsh JL, 445, 461 Marshall J, xx Marshall P, 289, 290 Marshallsay C, 181 Marsischky GT, 148 Marszalek PE, 787 Martell RL, 561 Martelli AM, 771 Martens CL. 477 Marth J, 595 Martin A. 32, 34, 39, 660, 662, 671 Martin AD, 149 Martin BJ, 376, 378, 381 Martin C, 116, 547 Martin CE, 315 Martin DW, 531 Martin GS, 342, 360 Martin J, 320 Martin LE, 671 Martin NC, 171, 175 Martin del Rio R, 8 Martindale D, 446, 450 Martinez SE, 224 Martinez-Balbas MA, 255 Martinez-Lopez MC, 290 Martino MC, 671 Martinotti S, 38 Marwaha N, 479 Marx A, 197, 198, 212 Marz W, 426, 427 Masai H, 359, 362, 364 Masamura Y, 145 Mascaro L. 709 Maser RS, 123, 124 Maskell DJ, 662, 672 Mas-Oliva J, 411 Mason P. 295 Mason W, 890 Masoud H, 688 Massire C, 176 Masson JY, 74 Masteller EL, 125 Masters El. 290 Masuda T, 141, 345, 359, 360

Masukata H. 337, 339 Masumoto H, 359, 360 Masumoto J, 377, 378, 381, 393 Masutani C, 20, 32, 33, 35, 38, 153, 154, 199, 250, 257 Mata NL, 570, 571 Matagne A, 798, 803 Matera AG, 169, 183 Matern U, 731, 739 Matewish MJ, 662, 667, 670 Matharu P. 283 Mathews D, 910 Mathews MB, 376, 381, 396, 819 Mathieu N, 126 Mathieux N. 600 Mathis D, 107 Mathison JC, 639, 653 Matouschek A, 794 Matray TJ, 195, 201, 214 Matsuda S. 427 Matsuda T. 32, 33, 35, 38, 39, 153, 154, 158, 199 Matsuhashi M, 707 Matsuhashi S, 707 Matsui E, 362, 364, 366 Matsui K, 23, 31, 475 Matsui T, 359, 360 Matsui Y, 381, 383 Matsukado Y, 487 Matsumoto H, 148 Matsumoto I, 444 Matsumoto K, 145 Matsumoto T, 564 Matsuo M, 547 Matsuzawa K, 352 Mattaj IW, 377, 384, 389 Mattei MG, 571 Matter N, 772 Matthews A. 126 Matthews CR, 794, 809 Matthews JM, 795, 796 Matthews MB, 394 Matthews N, 564, 565 Mattioli M. 376 Mattison K, 446, 450

Mattu M. 288 Matulic-Adamic J, 906 Maturi G. 774 Matus A, 413 Mauad TH, 568 Mauk MD, 476 Maurelli AT, 673 Maurel-Zaffran C, 378, 381, 383 Maurice M, 576 Mauro VP, 498 Mavris M, 641, 678, 687 Maxfield FR, 411 May EW, 120 May HD, 232 Maybodi M, 295 Mayer G. 739 Mayer H, 654, 673, 723 Mayer ML, 35 Mayer R, 279, 280, 560 Mayer RM, 709 Mayer SM, 228, 232 Mayer TG, 626 Mayer U, 548-54 Mayes AE, 388, 389 Mayford M, 498 Mayhew SG, 715 Mayne L, 790, 792, 799 Mayo RR, 579 Mayor S, 626 Mayor U, 787, 793, 807 Maywood ES, 309, 312, 313, 315 Mazin AV, 79 Mazloum N, 140, 141 McAleer MA, 564, 565 McAlpine AS, 238 McAlpine GS, 264 McArthur F, 665, 666 McBain W, 9 McBlane F, 126 McBlane JF, 111, 113 McBratney S, 393 McCallister EL, 807 McCallum CM, 254, 758 McCallum K. 659 McCance DJ, 257, 265 McCarville J, 122

McClennen S, 169, 384, 395 McCloskey JA, 838 McCluskey J, 376, 379, 396 McCluskey RT, 412 McConnell M, 144 McConnell RS, 909, 910, 912 McConville MJ, 626, 628 McCormack WT, 107 McCormick C, 446, 450, 451, 456, 457, 462 McDaniel R, 737, 748 McDermott G, 838 McDonald JP, 33, 34, 36, 38, 154, 155, 158 McDonough AA, 525 McDowell TL, 249 McElhinny SAN, 122 McEntee K, 21, 23, 24, 28, 77, 199 McEver RP, 596, 602 McFarlane RJ, 360, 361 McGarry TJ, 353 McGill JM, 477 McGlynn P, 29, 74, 93 McGough A, 757 McGrail M. 419 McGrath B, 417 McGrath BC, 674 McGrath ME, 286-88 McGregor WG, 32, 155 McGuinness MC, 574 McGuinness T. 475 McGuinness TL, 497, 500 McGuire JS, 475, 500 McGwire B, 296 McGwire BS, 296 McHenry CS, 29 McIlwraith MJ, 92 McIntosh TJ, 659 McKay CP, 227 McKay DB, 888, 900 McKenzie GJ, 31 McKeon F, 342, 343, 351 McKerlie C, 460 McKerrow JH, 282, 284, 286-88, 295 McKinney S, xxiii

309, 310, 314, 318, 321, 327 McLaclan JB, 549 McLaren RS, 394 McLaughlin M, 412 McLean PA, 230 McLoud SM, 519, 525, 530 McMahan CJ, 121 McMahon RE, 703 McManus TP, 32, 155 McMaster TJ, 596 McMaster WR, 295-97 McMenamin ME, 253 McMinn DL, 195 McMurry MT, 125 McNairn AJ, 339, 355, 356 McNally J, 286 McNamara P, 309, 315 McNeill RB, 501 McSwiggen JA, 890 Mdluli KE, 643, 655 Meador WE, 485 Means AR, 474, 475, 477, 479, 483, 484, 487, 488, 491 Means TK, 642 Mechali M, 344, 347, 349, 352-55, 364 Mechetner EB, 548, 554 Medina J, 573, 577 Medina-Acosta E. 295 Medina-Pérez WY, 555, 556 Medof ME, 628 Medoff G, 705 Medzhitov R, 636, 639, 641 Meek K. 122 Meerovitch KS, 377, 384, 391, 396 Meersseman G, 767 Meffre G. 39 Meggers E, 52, 54-56, 65 Mehta A, 40 Mehta P. 602 Meier PJ, 560, 563, 566, 569, 576, 577 Meier-Dieter U, 673, 675

McKinnon PJ, 122 MCKNIGHT SL, 307–31; Meijer DKF, 544, 551, 575, 576 Meijer OC, 550 Meijerman DW, 411 Meinjohanns E, 600, 619 Meirelles MN, 286 Meisel C, 554 Meissner W, 376, 391 Meister M, 249, 758, 761 Mekalanos JJ, 685 Melcher T, 819-23, 826, 827, 833-35, 840 Meldal M, 288, 294, 295, 595, 600, 619 Melek M, 114, 116-19 Melero JA, 823 Melixetian M, 343 Mellor J. 265 Mellstrom B, 772 Melo A, 707 Melo RL, 288 Melton DA, 818 Melton RJ, 514 Meltzer HY, 828 Menaker M, 308, 310-18, 321, 326 Mendel DB, 759 Mendelman L, 193 Mendez C, 730 Mendez J, 343, 355 Mendis D, 498 'Mendoza-Lopez MR, 291 Menetski JP. 75, 78, 86, 106, 109, 122 Meng WY, 407, 414 Menichini P. 193 Menon R. 319 Menon S. 710 Mentele R, 281 Menzel J, 688 Menzies AS, 415 Mercanti D, 384, 393 Mercer RW, 512, 514, 519, 523, 525 Merchant AM, 356 Merino S. 663 Mermer MJ, 823

Merriam RW, 756, 757

Merrigan SR, 863, 865 Merril CR, 146 Merrill GF, 148 Merrill-Skoloff G, 602 Merrow M, 317, 321 Merry CLR, 437, 453, 454, 463 Mersmann K, 908 Merson-Davies LA, 720, 728 Meshkov S, 657 Messager S, 313 Messenguy F, 772 Messer A, 54, 66 Messerschmidt A. 222 Messner P, 665, 666 Metcalf P, 297 Metherall JE, 554 Metzger RJ, 463 Metzger TE, 391 Meuer SC, 774 Meyer D, 419 Meyer J, 233 Meyer K, 440 Meyer MV, 642 Meyer O, 236, 238 Meyer RB, 79, 477 Meyer T, 482, 485, 486, 488, 491, 492, 495-97, 500, 501 Meyer UA, 13 Meyers RE, 771 Meyer-Spasche A, 319 Meyuhas O. 393 Mian IS, 821 Miao GG, 416 Miassod R, 378, 381, 383 Michael WM, 147 Michel B, 72, 74, 93 Michel F, 177 Michel JM, 720, 722, 737 Michel-Beyerle ME, 52, 54-56, 65 Michelson AM, 446, 462 Michelson S, 496 Michnoff C, 314 Micklem DR, 837 Mickley LA, 553, 554, 555 Midura RJ, 449

Miettinen TA, 573 Migliazza A, 38 Migliorini M, 411, 423 Mihalek RM, 336, 339 Mikhailenko I, 411, 425 Miki H, 769 Miki T. 771 Miki Y, 448 Miklos GLG, 594 Mikol V, 659 Milano MT, 66 Milburn MV, 866-69 Mildvan AS, 169 Miles A, 264 Miles MA, 286 Miles MJ, 596 Milla ME, 795 Millar-Craig MW, 308 MILLER BG, 847-85; 859, 861, 863, 864, 866, 871, 873, 876, 878, 879, 882 Miller C, 774 Miller DL, 171 Miller DW, 565 Miller G, 376 Miller H, 35 Miller J. 455 Miller LH, 278, 279 Miller NE, 725 Miller SE, 54, 55 Miller SG, 485, 487, 497 Miller SI, 644, 645, 647, 648 Miller SM, 861, 864 Miller TL, 6 Miller VP, 711, 712, 714 Millikin C, 175, 177, 180, Millikin CE, 175, 180, 181 Mills AA, 286 Mills AD, 345 Mills M. 123 Mills PB, 523 Milstein C, 37, 38 Mimura S, 345, 358-60 Minamide LS, 774 Minna JD, 412

Minnick DT, 199 Minopoli G, 411, 415 Minor W, 224 Mintenig GM, 538 Minto RE, 705 Mirelman D, 292 Mirkin SM, 79 Mirny L, 785, 806 Mishima M, 757 Miska EA, 257, 265 Misra S, 576 Mistlberger RE, 310, 315 Mitchell J, 349, 364 Mitchell P, 167, 173, 175, 181, 387 Mitchell RS, 78 Mitome M, 319 Mitropoulos KA, 317 Mitscher LA, 723 Mitsui S. 313 Mixter KS, xviii Miyajima N, 381 Miyake K, 555, 556 Miyake S, 313, 325, 326 Miyamoto E, 475, 476, 486, 487 Miyamoto Y, 309 Miyao T, 378, 383 Miyawaki A, 772 Miyazawa H, 140, 355 Mizobuchi S, 723 Mizoue LS, 609 Mizrahi V, 208 Mizuguchi G, 249, 250, 252, 254, 255, 257, 264, 267, 758, 759, 763 Mizukoshi T, 33, 158 Mizuno K, 444 Mizuno M, 616 Mizuno N, 449 Mizuno S, 758, 763 Mizuno T, 140, 358, 360 Mizushima T, 340, 349 Mizuuchi K, 105-8, 114, 119 Mo JY, 140, 141, 148 Mo XM, 119

Mo YR, 866, 869, 873

Mobley EM, 176 Mobley WC, 497, 498 Mochizuki J. 723 Modesti M, 123 Modi G, 296, 297 Moestrup SK, 411, 413, 414, 422 Mohammadi K, 531 Mohammadi M, 439 Mohan S, 641-43, 653 Moir D, 358 Moir JWB, 239 Moir RD, 411, 424 Mok W, 352, 363, 364 Mok YK, 800 Mol CAAM, 548-51, 553, 554, 559, 560, 564 Mol JN, 544 Molday LL, 570 Molday RS, 570, 571 Molenaar D, 547 Molloy SS, 477, 487 Molonev DJ, 594 Molony LA, 167, 173 Mombaerts P, 110, 125 Moncollin V, 145, 148 Mondadori C, 310 Mondesert O, 351, 364 Monkley S, 407, 414, 421 Monro RE, 908 Monsen KJ, 124 Monsigny M, 279, 280 Monteiro MA, 657, 661, 662, 664, 667, 669-71, 676 Moon KY, 337, 339 Moon RP, 283, 284 Moore DH, 552 Moore KC, 348 Moore KJ, 639 Moore KL, 596, 602 Moore L, 775 Moore P. 201, 255 Moore PB, 908 Moore RY, 312, 315, 318 Mooseker MS, 769 Mootz HD, 705

Moarefi I, 146

Moraes CT, 437 Morales JC, 194, 195, 202, 208, 209, 212, 215 Morales JM, xxi Morales MJ, 171 Morales-Alcelay S, 257 Moran LB, 809 Moran S, 195, 202, 910 Moran SM, 308, 309 Morandi V, 286 Moras D, 113 Moreau J, 344, 349 Moreau PL, 22, 83 Morehead J. 281 Morel P. 86 Moreno GT, 256, 257, 758 Moretti M, 497, 498 Morfin JP, 483 Morgan BA, 148 Morgan JI, 416 Morgan PJ, 313 Morgan TV, 228 Morgan WF, 43, 154 Mori H, 424 Mori Y. 498 Moriguchi R, 652 Morimatsu K, 84, 85 Morin PJ, 461 Morishima M. 547 Moriya M. 64 Moriya T, 312, 314, 316 Moriyama K, 774 Morley CDG, 7 Mornon JP, 119, 120 Morona R, 647, 673, 678, 679, 681, 684, 687 Morrical SW, 74, 78 Morris C, 679 Morris HR, 672 Morris J, 175, 177, 180, 182 Morris RE, 411 Morris SM, 415, 420 Morrison A, 151 Morrison CJ, 296 Morrison DC, 636, 657, 676 Morrison TB, 794 Morrow T, 109, 124

Morse DP, 177, 824, 825, 830, 833, 843 Morshead KB, 126, 250, 268 Mort JS, 295 Mortenson LE, 228, 233, 234 Morton CC, 339 Morton G. 723 Morty RE, 281 Morwald S, 414 Morzycka-Wroblewska E, 107 Mosbacher J, 823, 826, 827, 833, 834 Moseley SL, 758-61 Moser CC, 225, 241 Moses J, 448, 449 Moses RE, 29 Moshous D, 121, 123 Moskaug JO, 412 Mosser DM, 295, 296 Mosser J. 574 Mossi R, 134, 146 Mössner J, 568 Mostoslavsky R. 125 Motamedi H, 740 Mottino AD, 562 Mottram JC, 283, 284, 286, 288, 293-95, 299 Moult J. 785 Moulton V, 172 Moxon ER, 657, 671, 672 Mover SA, 831 Moynault A, 571 Mozzherin DJ, 144 Mrazek J. 653 Mrosovsky N, 313, 315 Muchardt C, 249, 761, 775, 776 Muchmore SW, 228 Muegge K, 758 Mueller PR, 336, 339 Mueller R, 284 Mueller SA, 478 Muench KA, 83

Muenke M, 422, 423

Muguruma K, 450, 457

Mühlradt PF, 688 Muir TW, 611 Mukamel S. 57 Mukherji S, 484, 487-89 Mullally M, 286 Mullenders LHF, 33, 34, 43, 154 Müller B, 86 Müller C, 249 Muller D, 476 Muller E, 757 Muller F. 257 Müller F, 715 Müller G. 628 Muller JE, 308 Muller JG, 52, 63, 64 Muller L, 675 Müller M, 538, 539, 544, 547, 558, 562 Müller T. 728 Muller U, 477 Muller W. 39 Muller WA, 559 Muller WE, 378 Muller YA, 732 Muller-Ehmsen J, 519, 525 Muller-Loennies S, 636, 667 Mulligan RC, 111, 458, 459 Mullins RD, 756 Mulloy B, 439, 444, 453 Mumby MC, 413, 416, 417, 420, 425 Münck E, 225, 228, 231 Mundy C, 111 Mundy CL, 113, 120 Mungthin M, 283 Muniyappa K, 79 Munoz MD, 318 Munoz RH, 318 Munoz V, 785, 800, 801, 804 Munro S. 594 Münsterkötter M, 252, 267 Murakami H. 345 Murakami-Murofushi K, 124 Murakumo Y, 32 Mural RJ, 594 Muramatsu M, 40

Nada S, 559

Nadanaka S, 448

Nadarajah B, 419

Nagai K, 378, 453

Naef F, 320, 323, 324

Nader HB, 437

Nagai Y. 639

Nagano K, 519

Muraoka M, 461 Nagaoka H, 124 Murchie AI, 903 Nagarajan S, 628 Murdoch AD, 436, 437 Nagasawa H, 284 Murphy DG, 823, 830, 831 Nagasawa K-i, 36 Murphy FL, 177 Nagase T, 312, 316, 381, 413 Murphy HW, 703 Nagase Y, 124 Murphy KP, 785 Nagashima Y, 151 Murphy MR, 264 Nagata E, 771 Murphy R, 772 Nagata K, 547, 774 Murray JB, 901, 909 Nagata N, 554 Murray JM, 820, 834-36 Nagawa F, 119 Murray RG, 652 Nagel G, 522 Murray SR, 643 Nagel R, 837 Murre C. 126 Nagy Z, 555 Murthy SS, 461 Naim AC, 474, 475, 481, 482, 485, 487, 488, 492 Murzin AG, 241, 835 Musahl C, 348 Naismith JH, 709, 710, 736 Muschen M. 38 Naito M. 550 Musco S, 412 Najarian RC, 890 Musisi H, 264 Najjam S, 444 Mustacich DJ, 575 Nakae T, 685, 687 Muth GW, 908 Nakagawa KH, 242 Muto T. 40 Nakahara Y, 618, 625 Mutomba MC, 289 Nakai S, 891 Muzi-Falconi M, 351, 364 Nakai T, 412, 652 Mvondo DN, 227 Nakai W. 362 Myers DC, 460 Nakajima D, 413 Myers EW, 594 Nakajima K, 416, 417 MYERS JK, 783-815; 793, Nakajima PB, 106, 109, 122 805-9 Nakamura A, 448 Myers M, 267 Nakamura T, 444 Myklebost O, 410 Nakamura W, 319 Myung JM, 289 Nakano S-I, 895, 899, 901, Müller W, 155 902, 904, 905, 907 Nakasako M, 512, 513, 516, N 524, 526, 527 Nakashima N. 41 Nabeshima K, 625 Nakata A. 23, 28 Nabulsi L. 550 Nakatani K, 52, 54, 64 Nackerdien Z, 251, 264 Nakatani Y, 254, 255, 257,

264, 267

Nakato H, 460

Nakayama J, 608

Nakayama M, 413

Nakayama Y, 145

Nakhasi HL, 394

Namsaraev EA, 85, 86

Nalin CM, 363

Nanjangud G, 37, 38 Nano FE, 643, 655 Napolitano R, 29 Nara PL, 596 Naranjo JR, 772 Narlikar GJ, 248-50, 252, 253, 258, 259, 262, 767, 768, 888, 890, 895, 903, 909, 910, 912 Nascimento AE, 286 Nash EA, 554 Nasheuer HP, 134, 151 Nasmyth K, 266, 339, 341, 342, 350, 351, 353, 356, 360, 365, 764 Nasmyth KA, 351 Nastri HG, 84 Natale DA, 339, 340, 355 Natarajan K, 163, 251 Nathan BP, 425 Nathans J, 571 Nauli S. 807 Naumann D, 798 Naundorf A, 728 Navarro-Gonzalez R. 227 Navarro-Poulsen JC, 866, 869 Navas TA, 147 Nayak S, 90 Naydenova I, 54 Neal B, 712 Neal C. 265 Nebl G, 774 Neefjes J, 544, 546 Neels JG, 411 Neely KE, 163, 249, 250, 257-59, 264, 267, 759, 763 Neely MW, 562 Neergaard TB, 809 Negishi M, 452 Neigeborn L, 764 Neipp L, 723 Neira JL, 787, 802 Neklason DW, 554 Nelms BE, 124 Nelsestuen GL, 709

Nanduri S, 835

Nelson CR, 594 Nelson HB, 479 Nelson JR, 32, 33, 40, 151, 155 Nelson K, 414 Nelson KE, 637, 652 Nelson RG, 284 Nemazee D, 107 Nemeth A, 255 Neri A, 38 Nesbitt S, 901, 908 Nesper J, 673 Ness GC, 573, 574 Nestor NB, 514 Neubauer G, 381, 396 Neuberger MS, 32, 37, 103 Neuendorf SK, 78 Neufeld EB, 573 Neuhard J, 675 Neumann KW, 448 Neumann RD, 79 Neumeister P. 37, 38 Neunteufl A, 821 Neuwald AF, 341 Neve B, 578 Nevins JR, 340, 355 Nevitt MF, 415, 419, 423, 427 Newborg MF, 704 Newman DJ, 747 Newman GC, 318 Newport J, 147, 345, 350, 351, 353, 359, 362, 364 Newport JW, 348 Newton EM, 479 Newton GJ, 685, 688 Newton WE, 232 Neyfakh AA, 549 Nezu J, 255 Ng DTW, 678 Ng HH, 257, 758 Ng SY, 777 Nghiem P, 477, 487 Nguyen DH, 626 Nguyen HB, 309 Nguyen H-HT, 242 Nguyen L, 550, 573, 574

Nguyen N, 499 Nguyen TT, 83, 289 Nguyen VQ, 348, 352, 354, 364 Nhamburo PT, 13 Ni J-H, 562 Ni YS, 665 Nichol ST, 823, 830, 831 Nicholson J, 253, 776 Nicholson N, 168 Nicolaou KC, 703 Nicolet Y. 233-35 Nie ZQ, 253, 758 Niebuhr K. 415 Nielsen JM, 523 Nielsen SJ, 257, 265 Niemann R, 449 Nienhuis EF, 558 Nies AT, 558, 562, 563, 577 Niethammer M, 420 Nigg EA, 378 Nightingale KP, 254, 257, 262 Niikura T, 427 Nikaido H, 661, 685, 687 Nikaido K, 685, 687 Niles JL, 412 Nilges M, 835 Nilsson J, 821, 841 Nilsson KR, 554 ·Nimick M, 297 Nimpf J, 413 Nimura Y, 36 Niranjanakumari S, 166, 168, 179 Nishida E, 757 Nishida Y, 479 Nishikawa F, 891, 900, 904, 905 Nishikawa K, 168 Nishikawa S, 172, 891, 895. 898, 900, 904, 905 Nishikura K, 818-21, 825, 831, 834-36, 839, 840 Nishimoto S, 345 Nishimoto T, 344, 349 Nishimura C, 808

Nishimura O, 652 Nishitani H. 344, 349, 351 Nishitani M, 547 Nishiyama K, 555, 556 Nissen A, 550 Nissen P. 908 Nisson P. 32 Niswender CM, 825, 827, 828, 834 Nitzan A, 57 Noda I, 560 Noda M. 512 Noe DA, 377, 381, 386, 388, 394, 396 Noe J, 569 Nogomori T, 153 Noguchi S, 512, 518, 525 Nohga K, 376 Nohmi T, 21, 29, 31 Nojima H, 345 Nolan JM, 176 Noller HF, 703 Nolting B, 787, 795 Nomura H, 512, 513, 516, 524, 526, 527 Nomura N. 413 Noonan B, 683 Noordzij JG, 126 Norbeck L, 514 Nordborg C, 426 Nordén B, 77, 86 Noren CJ, 611 Norgard-Sumnicht KE, 444, 453 Norman BH, 561 Norris SJ, 637, 652, 653 Nosjean O, 626 Noskov VN, 145 Notarangelo LD, 121 Nougarede R, 362, 364 Nourani A, 252, 758, 759, 763 Novak S, 413 Novick P. 772 Novikova OS, 619 Nowak G. 774

Nowicka AM, 32

Nukada T, xxi

Numano R, 311, 316 Numata S, 32 Nummila K, 644 Nunes P. 641 Nunez ME, 52 Nurse P. 141, 147, 344, 349, 351, 354, 360 Nusse R. 775 Nussenzweig A, 123 Nussenzweig MC, 124 Nussenzweig V, 628 Nusslein-Volhard C, 639 Nyborg AC, 231 Nycander M, 286 Nykjaer A, 412, 422 Nyland SV, 365 Nylund L, 453 Nymeyer H, 785

0

Oakes R, 460 OAS TG, 783-815; 789. 794, 803, 805-10 Oberhauser AF, 787 Oberink JW, 552 Obermoeller-McCormick LM, 410 O'Brien CA, 377, 389, 394, 476 O'Brien JA, 312 O'Brochta DA, 116 Obsil T, 531 Obuse C, 339, 340 Ocadiz R. 290 Occi JL, 739, 740 Ochoa S. 819 Ockwig N. 230 O'Connell MA, 818-20, 823, 825, 828, 829, 835 O'Connell W, 644 O'Connor JP, 183, 295 O'Connor MB, 445, 461, 908 O'Connor RA, 561 O'Connor SE, 616

Ocorr KA, 487

O'Dell TJ, 417

Odom AR, 772 Odom DT, 56, 61, 62 O'Donnell M, 21-25, 27, 29, 41, 75, 138, 140, 145, 146, 198, 199, 343, 358 O'Donnell MO, 145 O'Donoghue AC, 876 O'Donovan SM, 286 Oelkers C, 741 Oertelt C, 665 Oesterhelt F, 787 Oettinger MA, 110-13, 116, 119, 120, 125, 126, 250, 268 Ogata H, 639 Ogawa AK, 195 Ogawa H, 85, 88, 124, 444, 512, 513, 516, 524, 526, 527 Ogawa K, 563, 566, 577 Ogawa M, 417, 420 Ogawa S. 319 Ogawa T, 74, 84-86, 88, 90, 124, 448, 618, 636, 639, 641 Ogawa Y, 337, 339 Ogi T, 35, 154 Ogino K, 366 Ognibene A, 771 Ogrodnik A, 54 Ogryzko VV, 758, 759, 763 Oguchi H, 319 Oguni A, 483 Ogwaro KM, 106 Oh BK, 168, 176, 177 O'Hara H. 286 Ohara O, 413 * O'Hara PJ, 823, 830, 831 Ohashi E, 35, 38, 154, 199 Ohashi K, 774 Ohga T, 563 Ohi Y, 449 Ohl ME, 644 Ohlrogge JB, 655 Öhman M, 835, 837, 840 Ohmi S, 377, 391 Ohmori H, 18, 31, 33, 35, 41, 135, 136, 151, 153 Ohndorf UM, 378, 395 Ohno M, 476 Ohsako S, 479, 482, 488 Ohshima M, 474 Ohshima T, 420 Ohta K, 124 Ohta T. 124, 512, 518, 525 Ohtsubo T, 550, 560 Ohtsuka E, 889 Ohya T, 147 Oivanen M, 890, 906 Oka S. 448 Okada A, 57, 107 Okada T, 312, 316 Okahata Y: 68 Okajima T, 448 Okamato AY, 578 Okamoto H, 496 Okamoto I, 771 Okamoto T, 427 Okamura H, 312, 319 Okamura N, 548 Okano H, 249 Okawa Y, 682 Okayama H, 345 Okazaki K, 106 O'Keefe L, 407, 414, 421 Okhuysen PC, 281 Okret S, 577, 578 Oksman A, 282-85, 299 Okumura Y, 449 Okumura-Noji K, 500 Okuno S, 482 Okuno Y. 339, 355, 356 Olano C, 730, 748 OLAVE IA, 755-81; 251, 252 Oldberg A, 449 Oldham L, 609 O'Leary MH, 860, 863, 864, 870 Oleinikov AV, 415 Oleschuk CJ, 561 Olivares H, 123 Oliveberg M, 793, 803 Oliver WRJ, 578 Ollick T, 487 Olmsted EA, 144

Olsen LR, 641 Olsen SL, 559 Olson EC, 417 Olson JE, 285 Olson SK, 454, 456, 457 Olsthoorn M, 670, 682, 683 Olsthoorn MM, 657, 671 Oltz EM, 110, 122 Olwin BB, 439 Oma Y, 758, 763 O'Mahony DS, 639 O'Malley S, 79 Omay HS, 518, 525 Omori A, 347, 348, 355 Omura S, 704, 705 O'Neil KT, 484 O'Neill DW, 264 O'Neill GM, 566 Onishi H, 313 Onishi HR, 639, 642, 652 Ono E, 652 Ono M, 563 Ono T, 477, 484, 491 Onoda K, 773 Onrust R, 145, 146 Onuchic JN, 785, 796, 803, 804 Ooi J. 415, 427 Opal SM, 636, 657, 676 Opdenakker G, 450, 594 Opperman T, 41 Opresko PL, 200 O'Rear JL, 901 O'Rear L. 148 Orellana A, 452 Oren G, 548 Orita M. 906 Orkin SH, 253 Orlando RA, 415 Orlowski M, 284 Orme-Johnson WH, 228, 231 Orn A, 295 Ornitz DM, 439 O'Rourke DM, 249 Orr AH, 123 Orr-Weaver TL, 337, 338, 340, 344

Orsó E, 572, 578 Ortega-Lopez J, 297 Orth K. 411 Ortmann P, 731, 739 Ortoleva-Donnelly L, 908 Osaka H, 410, 423, 427 Osborn MJ, 665, 674, 675, 688 Osborne-Lawrence S, 428 Oscarsson LG, 455 Osguthorpe DJ, 785 Osheroff WP, 199, 200, 213 Oshima S. 319 Oshimura M. 121 Oshiro G, 362, 366 Oshiumi H, 124 Osipiuk J, 24 Osley MA, 251, 264 Osmark P, 809 Osmond BC, 358 Ossipow V, 255, 310, 758 Otani H, 410, 412 Otevrel T. 122 Oths PJ, 709 Otmakhov N. 476 O'Toole G, 661 Otsubo K, 554 Ott R. 147 Otten SL, 730 Ottenhoff R, 560, 562, 567-70, 572, 576, 579 Otter M, 557 Otting F, 9 Otwinowski Z, 224 Otzen DE, 793, 795-97, 801, 803, 804 Ou J-H, 890 Ouimet CC, 497 Oussenko I, 545 Ouyang Y, 476, 499 Ouyang Y-B, 602 Ovchinnikov LP, 392, 393 Overath P, 295 Overholser JC, 828 Ovodov YS, 732 O-Wang J, 35 Owen DJ, 628 Owen JS, 427

Owen-Hughes T, 249, 258, 259, 261, 767, 768 Owen-Hughes TA, 767 Owens JC, 362 Oyelere AK, 905, 907 Ozawa N, 88 Ozinsky A, 639 Ozkan SB, 795, 803 Ozvegy C, 547, 555

P

Pabich W, 645 Pacan JC, 675 Pace CN, 793 Pace NR, 166, 168, 170, 173, 175-77, 899 Pachalcyzk T, xx Paciotti V, 147 Padilla-Vaca F, 292 Paetz KE, 295 Pagan R, 168, 175, 179 Pagan-Ramos E, 176 Page AL, 641 Page CC, 225, 241 Pahl PMB, 361 Pai EF, 866, 869, 873 Paibir SG, 564, 565 Paik DS, 501 Paine-Saunders S, 460, 461 Painter G, 642 Pak DT, 339 Pak M, 385 Pak WL, 823, 828 Palacios I, 377, 384, 389 Palade GE, 456 Palay SL, 319 Palejwala VA, 201 Palfrey HC. 475 Palladino F, 257 Palladino MJ, 819, 820, 823, 825, 828, 829 Palmacci ER, 600 Palmer AG III, 789 Palmer J, 255, 286, 287 Palmgren MG, 513, 514 Paloma LG, 703 Pan AA, 293

Pan T, 166, 168, 176, 898-900 Pan WJ, 421 Panavotou G. 121 Pande VS, 804 Pandey PK. 200 Pandey VN, 200 Paneth P, 863, 864, 870 Panigrahi AK, 171 Panin VM, 594 Pannell R. 37 Pannicke U, 121 Pannone BK, 169, 376, 377, 384, 386-88, 391, 394 Pannucci JA, 166 Pantaloni D, 773 Panwala CM, 550, 562 Panyutin IG, 79 Papac D. 615 Papaefthymiou V, 230, 231 Papaioannou VE, 110, 125 Papathanassiu AE, 417 Papavasilliou FN, 158 Pape H, 712 Papoulas O, 249, 253, 254, 758, 761 Pappin DJC, 122, 339, 349 Pappu RV, 800, 808 Paques F, 72 Paradies MA, 498 Pardi A, 177, 903 Pardigon N, 394 Parekh B, 266, 267 Parekh RB, 594 Parillo JE, 639 Paris PL, 195, 201 Park PW, 436 Park S-H, 720, 722 Park SW, 554 Parker CT, 661 Parker MW, 483, 577, 578 Parkin ET, 427 Parkin NT, 392 Parks DJ, 578 Parlanti E, 145, 148, 150

Paro R. 775

Parodi AJ, 286, 676

Parry D, 253, 776

Parsons R, 227 Parsons WJ, 181 Parthasarathy N. 444 Pascaly M, 63 Pascual A, 172 Pascucci B, 145, 148, 150 Pasek DA, 861, 862 Pasero P. 361, 365 Pashinsky I, 548 Pasion SG, 348 Pasqualucci L, 37, 38 Passy SI, 74 Pastan I, 7, 544, 547, 553 Pastan IRM, 544, 547, 549 Pastink A. 32 Pastore A, 835 Pastorino L, 501 Patallo EP, 741, 746 Patapoutian A, 407, 421 Patchett AA, 652 Patchornik G, 512, 529 Patel DJ, 113 Patel H, 284 Patel PH, 200, 216 Patel SS, 348 Pathak K, 412 Patil CK, 121 Patlak CS, 319 Pattatucci AM, 758, 761, 775 Patten P. 37 Patterson JB, 820 Patton BL, 487 Patton DE, 823, 828, 835 Paul K. 860, 882 Paul L. 85 Paul MS, 823, 830 Paull TT, 111, 112, 119, 123, 124, 341 Paulsen H, 598, 600, 619 Paulusma CC, 557, 560, 562 Pause A, 384, 392 Pavlov YI, 32, 39, 158

Payen L, 562

Pease RJ, 818

Payne ME, 484, 491

Pearlman AL, 419

Pazin MJ, 254, 255, 257

Pedemonte CH, 512, 516 Pedersen LC, 448, 449, 452, 453 Pedersen LG, 452, 453 Pedersen PA, 512, 523, 525 Pederson DS, 350 Pederson T, 177, 181, 183, 388, 398 Peebles CL, 183 Peek R. 389, 393 Peer GT, 639 Peitsch MC, 517 Peixoto AA, 823, 828 Pejler G, 446, 452, 462 Pelak BA, 639, 642, 652 Pelanda R, 125 Pelizon C. 364 Pellegri G. 320 Pellegrini L. 439 Pellerin L. 319, 320 Pelletier H, 138, 150, 211, 215 Pellicioli A, 147 Pellizzoni L, 384, 393 Pelosof L. 283 Peluffo RD, 523, 525 Pemberton LF, 377, 379, 383 Pendurthi UR, 411 Peng A, 109, 124 Peng J, 420 Penman S, 757 Pennings S, 767 Penny D, 172 Peppelenbosch MP, 559 Peppler MS, 684 Peracchi A, 890, 903, 909 Percipalle P, 757 Pereira AS, 239-41 Pereira MJ, 897, 898, 903, 910 Peret J. 318, 326 Pereverzeva I, 352 Perez L. 594 Perez M. 641 Perez-Soler R, 705 Perfilieva E, 426

Peczuh MW, 743

Pergola F. 122 Perham RN, 732 Periyasamy SM, 519 Perkel DJ, 476 Perkins G, 342, 349, 351, 364 Perl D. 787 Perler FB, 611 Perlman S. 476 Perlog V, 723 Perna NT, 639 Perreault DM, 890, 906 Perreault JP, 903 Perrimon N, 445, 446, 450, 460-62 Perrino L. 484 Perrotta AT, 6, 888, 890, 891, 894-96, 898, 901, 902, 904, 905 Perry MB, 659, 661, 662, 664, 667, 669-71, 673, 674, 676, 684, 685, 688 Perry RP, 256 Perryman LE, 122 Persechini A, 492 Persinger J. 261 Persson B, 709, 716, 717 Persson K. 668 Pesole G. 181 Pestic-Dragovich L, 774 Pestka S. 908 Pestonjamasp KN, 773 Peter B, 20 Peter-Katalinic J, 609 Peters A, 38, 319 Peters GB, 566 Peters GJ, 561, 563 Peters ID, 799 Peters JGP, 565 Peters JW, 228, 232-35 Petersen BO, 343, 351, 354, 363, 364, 657, 671 Petersen J, 482, 500 Petersen S, 123 Peterson CL, 248-51, 254, 258-60, 262, 264, 267, 758, 759, 764, 766-69 Peterson JD, 481, 652

Peterson SR, 121 Petfalski E. 167, 173, 175. 181, 376, 377, 384, 386, 387, 394 Petit M-A. 24 Petit-Koskas E, 891, 892, 904, 905 Petitou M, 440, 455 Petrini JH, 124 Petroni EA, 744 Petros LM, 455 Petrotchenko E, 452 Petrucci TC, 774 Petruska J, 201, 210 Petryniak B, 107, 608 Petschek JP, 823 Pettersson I, 453 Pettersson RF, 439 Pettersson U, 286 Pettit DL, 476 Peyret N, 201, 202, 214 Pfaffstetter L, 821 Pfannschmidt M, 563 Pfeifer K, 378 Pfeiffer P, 552 Pfeiffer T, 170, 179 Pfleiderer W, 890, 906 Pflumm MF, 336, 339 Pham P, 20-22, 24, 25, 27, 29, 75, 199 Phan L, 385 . Phelan ML, 250, 252-54, 258, 261, 264, 267, 767, 768 Phelps ME, 319 Philimonenko A, 774 Philimonenko AA, 774 Phillips B, 34, 41, 145 Phillips BB, 41 Phillips LM, 863, 865 Phillips MS, 413 Philp AV, 419 Phongdara A, 147, 359, 360 Piard K, 140 Piatti S, 342, 351, 356 Piazza GJ, 860 Picard I, 279, 280 Picart F, 789

Piccirilli JA, 899, 900 Pichetshote N. 576 Pickett CJ, 231 Piehler A. 578 Pieler T. 397 Pieper PA, 714, 715 Pieper R, 705 Piepersberg W, 739 Pierandrei-Amaldi P. 384. Pierce SK, 626 Pierek AJ, 235 Pierek J. 228 Pierstorff E, 377, 384, 386, Pietromonaco S, 412 Piggins HD, 319 Pijnenborg ACLM, 555, 556, 563, 564 Pikas DS, 452 Pilch DR, 123 Pilia G, 460 Pilkuhn S, 626 Pillus L, 758 Pines J, 339, 355, 356 Pingel S. 293, 294 Pinhal MAS, 454, 456, 457 Pinkstaff JK, 498 Pinson KI, 407, 414, 421 Pinto BM, 702 Pinto LH, 309 Pinto S, 336, 339 Pinz KG, 36, 149 Pippert T. 551, 555 Pippert TR, 554 Piras C, 233, 235 Pirrung M, 639, 642, 652, 653, 655 Piscitelli C, 168 Pissowotzki K. 739 Pitas RE, 413, 425 Pitt GS, 485 Pitulle C, 166, 173, 175-77 Piwnica-Worms D, 553, 554 Pizer LI, 381, 396 Pla M, 479 Plante OJ, 600 Platt J, 643

Platz S, 757 Platzer M. 123 Plautz JD, 311 Plaxco KW, 797, 806 Playfair JH, 284 Pleasure SJ, 407 Plebani A, 40 Plevani P, 147, 148 Ploegh HL, 614 Plomp AS, 567 Plotnikov AN, 439 Plotz BM, 645, 652 Ploux O, 706, 711, 712, 715 Pluim D, 555 Pluk H, 167, 173, 182, 183 Plunket KD, 578 Plunkett G, 639 Pochart P. 180 Podsypanina K, 498 Poduje CM, 644 Podust VN, 145, 146 Podyminogin MA, 79 Pohlmann J. 616 Polacek N, 908 Polakis P, 407, 421 Polanyi M, 851, 881 Polissi A, 642, 648 Politino M, 12 Politis PK, 265 Pollard KJ, 251 Pollard TD, 756, 769, 773 Pollard WT, 57 Pollinger A, 848, 881 Pollock KGS, 294 Polonsky T, 443 Polson AG, 821, 823, 831, 832, 834, 836, 838, 840 Polticelli F, 288 Poltorak A, 636, 639, 641, 642 Poltoratsky V, 32, 34, 38, 39 Pomerantz SC, 838 Pons T, 827 Pontén I, 29 Poo MM, xxii Poolman B, 547 Poon S, 596 Poot RA, 255

Popa I, 425 Pope AL, 8 Pope B, 757 Pope M, 554 Pope RK, 773 Pope RM, 437 Poplack DG, 553 Popoff MY, 673, 674 Popot J-L, 232, 785 Popova AN, 687 Poppe C, 673, 674, 684, 685 Porath D. 68 Porcionatto MA, 437 Porreca P. 777 Porsch-Ozcurumez M. 578 Porter DJT, 861-63, 874 Pospiech H, 141 Post RL, 523, 524 Postigo AA, 253, 776 Postow L, 29, 74, 95 Potuschak T, 171 Poulos T. 222 Poulsen H, 821, 841 Poupon R, 569 Powderly WG, 705 Powell LM, 818 Powers R. 377 Powis G, 13 Poxton IR, 659 Pozzo-Miller L, 501 Prabu MM, 80, 84 Pradel J, 378, 381, 383 Prades C. 557 Prakash L, 20, 32-35, 38, 40, 153-56, 194 Prakash S, 20, 32-35, 38, 40, 153-56, 194 Pralle A, 626 Prasad R. 34, 36, 147, 149, 150, 155, 200, 215 Prasthofer T, 445 Prater CI, 562 PRATT MR, 593-634; 608 Pratt S. 561

Preitner N, 312, 313, 316,

Preston A, 657, 659, 671,

317, 321, 326

684

Preston BD, 199, 201 Preston-Hurlburt P, 639 Price C, 360, 361 Price EM, 525, 526 Price JL, 310 Price NPJ, 653, 654 Pridmore AC, 652 Priebe W, 705 Priest DG, 563 Priestley ES, 703 Prieto J, 798 Prigge ST, 284 Prihar HS, 454 Prilusky J, 223 Princivalle M, 440 Priyadarshy S, 54 Prockop DJ, 456 Proctor DJ, 895, 901, 902, 905, 907 Proctor M, 793, 803, 835 Proctor MR, 837 Prokhorova TA, 347, 357 Proud CG, 381, 396 Provenzano D, 297 Prudêncio M, 239-41 Pruijn GJM, 166, 167, 173, 182, 183, 377-79, 381, 384, 389, 392, 393, 395, 397 Prusiner SB, 626 Prydz K, 439 Prytulla S, 808 Ptaszek LM, 120, 121 Ptitsyn OB, 799 Pu HX, 512 Puchberger M, 665, 666 Pugh BF, 76, 77, 79, 86 Pugh PC, 478 Pullmann K, 578 Punkt K, 319 Puranam RS, 171, 175, 176 Purcell S. 642 Pursell ZF, 141 Putkey JA, 485, 491 Putman M, 547 Pve DA, 437, 439

Pyle AM, 898, 899, 910

0 Qi HY, 149 Qi PX, 792 Qian Y-M, 558 Qian Z, 425 Qin J, 376, 381, 396, 835 Qiu JX, 118-20 Qiu QQ, 413 Qiu WT, 446, 452, 462, 544, 559 Qiu YH, xviii Qiu ZH, 29 Qu Q, 547, 549 Que NLS, 642, 645, 648, 653, 654, 716, 720, 722, 724, 728, 737, 738 Que XC, 291, 292 Quentin E, 445 Query CC, 378 Quinn DR, 773 Quinn J, 251, 758, 764, 767 Quinn TJ, 655 Quint L, 40 Quintana DG, 336, 339, 349 Quinten M, 295 Quiocho FA, 485, 838 Quirk S. 756 Quirós LM, 730, 736 Qureshi N, 639, 642 Qureshi ST, 639 R

Rabilloud T, 279
Rabindran SK, 556
Rabinowitz L, 264
Rabkin S, 201
Radaev S, 545, 546
Radcliffe LA, 308, 309
Radding CM, 74, 78, 79, 86, 90, 92, 93
Rademacher TW, 594
Rader K, 415
Radford SE, 785, 791, 797
Radika K, 642
Radman M, 20, 23, 28

Radzicka A, 850, 852, 855, 860, 881 Radziejewska-Lebrecht J, 675 RAETZ CRH, 635-700; 636, 637, 639, 641-43, 648, 651, 652, 654, 655, 663, 676, 690 Raftery EB, 308 Raggers RJ, 553, 560 Raghavan M, 546 Raghu G, 554 Raghunathan G, 79 Raghuraman MK, 355, 365, 366 Ragsdale SW, 236 Rahim R, 670 Rahman MM, 671 Raines RT, 905 Rajagopalan M, 21, 23, 24, 29 Rajewsky K, 32, 38, 155 Rajpal DK, 153, 154 Rajski SR, 62, 63 Raju TS, 615 Rakic P, 417, 426 Rakonjac J. 107 Rakowski RF, 522 Raleigh DP, 789, 806 Rall SC, 424 Ralph MR, 310, 312, 315 Ramachandra M. 547 Ramachandra-Shastry MC, 786, 792 Ramakrishnan V, 227 Ramalho-Pinto FJ, 289 Ramamoorthy R, 295 Raman R. 437 Raman S, 249 Ramirez MT, 499 Ramos A, 837 Ramos P, 446

Ramsden DA, 106, 109,

Ramso RA, 639

Randall SK, 23, 28

111-13, 119, 122

Ranallo R, 250, 255, 264

Rando OJ, 252, 758, 759, 761, 769, 772, 773 Randolph GJ, 554, 559 Randsholt N, 249, 758, 761 Rangachari K, 278 Rangarajan S, 29 Ransijn A, 295 Ransom DA, 297 Rao BJ, 86, 92 Rao H, 337 Rao LVM, 411 Rao VR, 598, 611 Rao VV, 560 Raphael P, 285, 298 Rapic-Otrin V, 34, 154, 158 Rapp M, 319 Rappa G, 559-62 Rappe J, 315 Rappelli P, 297 Rapraeger AC, 439, 440 Raschke TM, 799 Rasio D, 32 Raska CS, 437 Raska I, 181 Rasko DA, 671 Rasmussen JH, 523, 525 Rasmussen NS, 688 Rasmussen T, 239, 240 Rathbun G, 110, 122 Rathbun GA, 122, 126 Ratner L, 553 Ratner MA, 56, 57 Raught B, 498 Rauscher FJ 3rd, 265 Ravanat JL, 63, 64 Ravdin JI, 290 Rawadi G, 639 Rawlings ND, 276, 282 Ray BL, 642 Raychaudhuri S, 337, 339 Raychowdhury R, 412 Rayment IR, 80, 735 Raymond M, 551 Raynal M-C, 736 Rayssiguier C, 23, 28 Razanajaona D, 39 Razavy H, 92 Razi N, 459

Razskarovskii Y, 66 Re D. 38 Rea PA, 563, 564 Real J, 572 Reather J, 736, 740 Rebagliati MR, 818 Rebbeor JF, 560 Rebeck GW, 411, 423-25 Rechkoblit O, 35, 153 Rechsteiner T, 255 RECK-PETERSON SL. 755-81; 251, 252 Reddy GA, 809 Reddy KRN, 231 Reddy P. 309 Reddy R, 166, 177, 180, 182, 376, 394 Redeker V, 298 Redon C, 123 Reebs SG, 315 Reed DJ, 575, 576 Reed GH, 7, 725 Reed HE, 319 Reed SL, 291, 292, 297 Reedy MC, 642, 648 Reenan RA, 819, 820, 823, 825, 828, 829, 835 REES DC, 221-46; 227, 228, 230-32, 241 Reese TS, 481, 482, 500, 501 Reeve-Daly MP, 445 Reeves AJ, 426 Reeves BE, 317 Reeves PR, 636, 647, 675, 676, 678, 679, 681, 712, 716, 717 Refinetti R, 308 Regev R, 548 Reggio HA, 456

Register JC III, 77

Regué M, 663

Rehfuess C, 148

Reichart B, 757

Reichlin M. 376

83, 84, 86

Reichardt LF, 407, 421

Rehrauer WM, 25, 75, 78,

REICK M, 307-31; 309, 310, 314, 318, 321, 327 Reid CE, 891 Reid G, 560, 563-65 Reid JL, 257, 265 Reid MF, 716, 717 Reidl J, 673 Reilly TH, 166, 181 Reilly TR, 181 Reimer G, 181 Reinberg D, 254, 255, 257, 758 Reiner DJ, 479 Reiner R, 167, 173, 179, 183 Reinhard M, 415 Reinke H. 267 Reinstadler D, 798 Reinstein J, 787 Reipen T. 595 Reiter WD, 445 Reits EAJ, 544, 546 Reivich M. 319 Reizer A, 682 Reizer J. 682 Reizes O, 436, 461 Remaley AT, 573, 578 Remoundos MS, 296 Remus D, 336, 337, 338 Ren RXF, 195, 201, 202, 214 Renes J, 558, 562 Rennke S, 410 Rentsch KM, 579 Repa JJ, 573, 577, 578, 651 Repoila F. 399 Reppert SM, 310-12, 326 Represa A, 827 Resnick MA, 144 Ressad F, 773 Retey J, 7 Reuter H, 485 Reuven NB, 21-25 Revy P, 40 Reyes JC, 775, 776 Reyes-Spindola JF, 725 Reynaud C-A, 38, 40, 103 Reynertson R, 455 Reynolds N, 145

Reynolds PA, 728, 733, 740 Reznikoff WS, 116, 642 Rhee SG, 13 Rhodes D, 557, 767 Ribeiro AA, 644, 645, 647, 648, 653 Ricciardi-Castagnoli P, 642 Rice DA, 525 Rice DS, 413, 416, 417, 425 Rice KG, 735 Rice KP, 79, 85, 88 Rice P. 120 Rice PA, 671 Rich A, 819, 821, 822 Rich RC, 488, 489 Richard JP, 860, 876 Richards JC, 653, 659, 670, 671, 682, 688 Richardson CC, 140, 211 Richardson DC, 892 Richardson DJ, 239 Richardson JA, 181, 415, 419, 423, 427 Richardson JS, 892 Richel DJ, 552 Richmond TJ, 255 Richter JD, 499 Rick PD, 675, 682, 688 Rickling S, 497, 498 Rico M, 797, 798, 808 Riddell DR, 427 Riddle DS, 806 Rider CC, 444 Ridgway C, 857, 859, 866, 882 Ridley RG, 283, 284 Riedel IB, 414 Rief M. 787 Riesenfeld J. 453, 455 Rietschel ET, 636, 639, 641, 653, 659, 662 Rigatti B, 450 Rigneault H, 572 Rigotti A, 406 Ring HZ, 309 Ringpfeil F, 567 Ringvall M, 446, 452, 462, 463

Ronson CW, 657

Rini JM, 668, 685, 702 Rinke J. 376, 377, 379, 387, 389, 394 Rios A. 860 Ripperger JA, 310, 323, 324 Rishavy MA, 865 Risser SM, 54 Ritchings BW, 419 Ritzi M, 337, 339-41, 349, 353 Rivas L, 293 Rivellini F. 168 Rivola G, 741, 748 Robberson DL, 85 Robbiani DF, 559 Robbins JB, 652 Robbins PW, 456, 678, 687 Roberts BT, 361 Roberts CW, 253 Roberts D. 252 Roberts H. 280 Roberts IS, 673, 678, 683, 688 Roberts JD, 199 Roberts PB, 790, 800, 806 Roberts RJ, 62, 840 Roberts SC, 295 Robertson AD, 614, 642, 785, 790 Robertson CD, 289, 290, 293, 294 Robertson HD, 890 Robey M, 644 Robey R, 555, 556 Robey RW, 555, 556 Robidoux AL, 641 Robins P. 122 Robinson JL, 318, 326 Robu ME, 29, 93 Robyt JF, 702 Roca AI, 25, 74, 76, 80, 84 Rocchetta HL, 673, 675. 679, 682 Rocchi E, 556 Rochovansky OM, 7 Rock FL, 639 Rockett KA, 284 Rodén L, 445, 448, 454-57

Roder H, 786, 790-92, 799 Roderick SL, 641, 690 Rodes L, 424 Rodgers KK, 120 Rodier MH, 280 Rodriguez EC, 605, 608, 621 Rodriguez MA, 290 Roe SM, 228 Roegner-Maniscalco V, 22 Roenneberg T, 317, 321 Rogakou EP, 123 Roggero MA, 295 Roggwiller E, 279 Rogier G, 572 Rogne S, 410 Rogozin IB, 32, 38-40, 158 Rohatgi R, 769 Rohlfs RT, 715 Rohlman CE, 166, 167, 173, 175, 176, 178 Rohlmann A, 406, 410-12, 422 Roholl P. 637 Rohr J, 705, 707, 711, 740, 741 Rohrmann K, 449 Rokhsar DS, 804 Roll JT, 748 Roller PP, 596 Romana LK, 712 · Romano LJ, 208 Romano PR, 553 Romano-Spica V, 555, 556 Romanow WJ, 126 Romanowska A, 723 Romanowska E, 671, 723 Romanowski P, 336, 339, 353, 363-65 Romeijn RJ, 32 Romeo C, 111 Romesberg FE, 195 Romsicki Y, 547, 549, 553 Roncari G, 723 Roncarolo M-G, 107 Rong JH, 454 Rongo C, 479 Roninson IB, 547, 548, 554

Rook MS, 498 Roomp K, 572 Roos DS, 289 Ropp PA, 156 Rorke LB, 253 Rosa MD, 376 Rosankiewicz JR, 595 Rosbash M, 309 Roscigno RF, 397 Rose GD, 796, 800 Rose PG, 552 Rose SD, 66 Roseboom W, 235 Rosen A. 377 Rosen BP, 545, 546 Rosen C, 392 Rosen SD, 455, 608 Rosenbaum JL, 756 Rosenberg MF, 545, 558 Rosenberg N, 106 Rosenberg RD, 440, 447. 455, 458, 459, 463 Rosenberg SM, 31, 92 Rosenberry TL, 279 Rosenblum JS, 377, 379, 383 Rosenblum ND, 461 Rosenfeld L, 449 Rosenfeld MG, 316, 483, 487, 488 Rosenow C, 399 Rosenstein A, 499 Rosenstein SP, 891, 892, 894, 896 Rosenthal A, 655 Rosenthal PJ, 284, 285, 288, 290, 298 Rosenzweig AC, 239 Rosewell I, 122 Rosier M, 572 Rosing H, 552 Rosmorduc O. 569 Ross AW, 313 Ross DD, 556 Ross J. 394 Ross NA, 171 Rosseneu M. 572

Rossier BC, 519 Rossignol JL, 116 Rossmanith W, 171 Rossmann MG, 717 Rost D. 563, 564 Rostas JAP, 485, 486 Roth CB, 545, 546, 649, 650, 690 Roth DB, 106, 109, 111, 113, 114, 118-22, 125, 250, 268 Roth RA, 576 Roth SY, 125, 250, 268 Roth T. 32 Rothblum LI, 477 Rothenberg RJ, 652 Rothenfluh A, 310 Rothfield LI, 668 Rotruck JT, 8 Rottgardt D, 228 Roughton JFW, 853, 882 Rould E. 79 Rouse BT, 608 Roush WR. 288 Rousseau DL, 786 Rousseau-Merck MF, 253. Rousselle T. 146 Roux B, 626 Rowles A, 336, 339, 341, 345, 350, 351, 353, 363 Rowley A, 337 Roy J. 388 Roy K, 253 Roy S. 525 Royle GA, 827 Royzman I, 340, 344 Rozhnova SS, 687 Rozov A, 825, 826, 829 Rubenstein PA, 711, 712 Rubin D, 292 Rubin GM, 594, 775 Rubin JR, 895, 900 Rubinson DA, 376, 377, 384, 386-88, 394 Rudd PM, 450, 594, 612 Rudic RD, 309, 315 Rudolph FB, 838

Rueda P. 823 Ruefli AA, 553, 554 Rueter SM, 823, 827, 829 Ruevekamp-Helmers MC, 555 Ruhf ML, 249, 758, 761 Ruhnke M. 659 Ruiz JF, 36, 39, 156-58, 417 Ruiz-Sanz J, 802 Ruiz-Tachiquin ME, 291 Rukavina T. 659 Rumbley J, 790, 799 Rumney S, 195, 202 Runswick MJ, 83, 379 Ruoslahti E. 447 Ruosseau P, 426, 427 Rupert PB, 893, 895, 908 Rupp K, 283, 284 Rusak B, 310, 312, 318 Rushton G. 444 Russel FGM, 562, 565 Russell CS, 578 Russell DG, 295 Russell DH, 202 Russell P, 351, 364 Russell RN, 709, 910 Russo A, 360 Russo AF, 477 Russo T, 411, 415 Rust S. 572 Ruth A. 547 Rutherford JD, 308 Rutjes SA, 182, 377; 378, 384, 389, 393 RUTTER J, 307-31; 309, 314, 318, 321, 327 Ruzicka FJ, 712, 714, 715, 724, 735 Ryan SS, 647, 648 Ryberg H, 77 Ryder SP, 908 Rydstrom J, 323 Ryle MJ, 228, 232 Rymond BC, 387, 388 Ryo H, 479 Ryter JM, 835 Ryu S. 559

Rzepka RW, 201 Rzhetsky A, 538, 544, 557

2

Saalau-Bethell SM, 794 Saati SM, 477 Sabelko J, 787 Saccomanno L, 823, 833 Saccone C, 181 Sachs G. 524 Sachs JR, 531 Sacks DL, 296, 297 Sacristan M, 363 Sadhale PP, 378, 383 Sado Y. 461 Sadoff BU, 35 Sadofsky MJ, 111, 118, 119 Sadovskaya I, 659, 670 Saeki H, 250, 257 Saeki T, 560, 563-65 Saelinger CB, 411 Saenger W, 212, 895 Saenko EL, 411 Saez L, 310 Safaiyan F, 454 Saft H, 283 Sagar SG, 200 Sage KA, 623 Sage M. 309, 310, 312, 317 Sager G. 565 Sagher D, 201 Saha P. 339, 343, 349, 351, 354, 359, 363, 364 Sahm J. 194 Sahyoun NE, 483, 485 Sai Y. 551 Saiardi A. 771 Saier MHJ, 682 Saint R, 251 Saito A, 412 Saito H. 550 Saito I, 52, 54, 63-65 Saito T, 449, 450, 550, 560 Saitoh T, 486 Saitoh Y, 487 Sajid M, 278, 279 Sakai H, 757

Sakai J, 412, 413 Sakaki Y, 311, 316, 317, 321, 326 Sakamoto H, 558 Sakamoto K, 312, 316 Sakanari JA, 295 Sakano H, 106, 116 Sakmann B, 823, 826, 827 Sakulich AL, 376, 377, 381, 384, 386, 396 Sakura Y, 437, 454 Sakurai M. 860 Salah-Bey K, 720, 722, 737 Salas JA, 705, 707, 730, 736 Salavati R, 171 Saldeen T. 437 Saleh L, 861, 863, 874 Salem M, 570 Salen G, 573, 574 Salerno M. 558 Salgado-Garrido J, 175, 388 Sali A, 145 Salmivirta M, 436, 437, 439, 444, 454, 457 Salmon BL, 299 Salmon PA, 315 Salvati L, 288 Sambrook JF, 411 Sames D, 598, 600, 609 Sampath J, 556 Samstag Y, 774 Samuel CE, 819-21, 831 Samuels ME, 397, 398 Samuels ML, 251 Sanan DA, 425 Sancar A, 66, 309 Sanchez E, 342, 351, 363 Sanchez G, 514, 519, 525 Sanchez M, 342, 351, 363 Sand O. 411 Sandaltzopoulos R, 250, 254, 255, 258, 264, 758, 767 Sandbäck D, 452, 454, 459 Sander C, 229 Sanders JP, 544 Sanders-Bush E, 825, 827,

828, 834

Sanders-Loehr J. 239, 240 Sanderson KE, 669 Sanderson SJ, 288, 294, 295 Sandkvist M, 688 Sandler SJ, 20, 29, 31, 35, 72, 74 Sandlin R. 671 Sandlin RC, 673 Sandor V, 553 Sands AT, 253 Sandstrom A, 177 Sandusky PO, 176 Sanford T, 818, 820, 835, 839, 840 Sangier ML, 156 Sangoram AM, 308 Sanjo H, 636, 639, 641 Santagata S, 118, 121 SantaLucia J, 201, 202, 214 SantaLucia J Jr, 214 Santana JM, 280, 281 Santiago F, 712 Santocanale C, 339, 365 Santoro R, 255 Sarafanov AG, 411 Saraste M, 83, 239, 379 Sarde CO, 574 Sardini A, 545, 547 Sarkadi B, 539, 547, 557 Sarkar AK, 448 Sarkar S, 179, 183, 390 Sarnovsky RJ, 120 Sarnow P, 391, 393 Sarte M, 249, 254, 758, 761 Sartorelli AC, 549, 559-62 Sartori E, 705 Sarvotham H, 377, 378, 381, 393 Sasaki H. 614 Sasaki S, 420 Sasaki T, 444 Sasaki-Tozawa N, 390 Sasisekharan R, 437, 445, 455, 461 Saskiawan I, 616 Sato K, 347, 348, 355

Sato M. 346

Sato S, 641, 806, 833, 836

Sator V, 62 Sauer MHM, 54, 57 Sauer RT, 794, 795, 803 Sauna ZE, 547 Saunders AM, 424, 425 Saunders S, 460, 461 Saurin AJ, 265 Savard J. 255 Savary S, 571, 578 Savel J, 284, 285 Saville BJ, 891 Sawa A. 771 Sawa H. 249 Sawaya MR, 138, 150, 200, 211, 215 Sawchuk DJ, 107, 111, 118 Sawers G, 10, 12 Sawyer MM, 771 Sawyer S, 357 Saxena IM, 668 Sayegh MH, 554 Sayer J, 29 Sayid CJ, 806 Sbisa E, 171, 181 Scadden AD, 831 Scalley-Kim ML, 800, 807 Scarlata S, 531 Schade FU, 636, 639 Schafer DA, 756, 759, 768, 773 Schaff S, 891, 892, 904, 905 Schaffer A. 32, 39, 40, 158 Schaffer-Judge C, 84 Schaller HC, 414 Schamberg NJ, 596 Scharff MD, 32, 34, 38-40 Scharfstein J, 286, 288 Schatz DG, 103, 106, 109, 110, 112, 114, 116-21, 125, 158 Schaub TP, 562 Schechter I, 276 Scheckelhoff MR, 823 Schedl P. 397, 398 Scheer U, 181, 757 Scheffer GL, 548, 549, 555-57, 559, 560, 563, 564

Scheidt KA, 288

Scheiner-Bobis G, 525

Schellenberger A, 861

Schellens JHM, 551, 552

Scheper RJ, 557, 560, 563,

Schell MJ, 576

Schellekens H, 831

564 Schepers A, 337, 341, 344, 349 Scherly D, 376 Scherrmann J-M, 550 Schibler U, 308, 310-13, 315-17, 321, 323, 324, Schiemann O, 52, 54 Schiene C, 785, 810 Schiffer HH, 827 Schimke RT, 548 Schindelin H, 228, 232 Schindler T. 787 Schinkel AH, 548-56, 561, 562, 567, 568, 570, 650 Schiodt J, 809 Schlaepfer DD, 417 Schlagenhauf E, 297 Schlecht S, 657, 671 Schlegel A, 427 Schlegl J, 168, 176 Schlessinger D. 461 Schlessinger J, 414, 439 Schlessman JL, 228, 232 Schleyer A, 600 Schlichter A. 252 Schlissel M. 109, 124, 391 Schlissel MS, 109, 110, 126 Schloss JV, 732, 733 Schmechel DE, 424, 425 Schmid A, 252, 267, 823, 831 Schmid B, 227 Schmid CW, 376 Schmid FX, 792, 806 Schmid R, 731, 733 Schmidt FJ, 177 Schmidt G, 636, 639 Schmidt H, 710 Schmidt MC, 251 Schmidt RR, 598, 626, 728

Schmidt WG, 628 Schmitt I, 757 Schmitt L, 539, 544 Schmitt ME, 166, 167, 181 Schmitz AA, 295 Schmitz G, 544, 578 Schmitz V, 286, 287 Schnaitman CA, 636, 661, 663, 669, 670, 675, 676, 678 Schnapp BJ, 419 Schneider A, 420 Schneider C, 774 Schneider H, 657, 659 Schneider JP, 809 Schneider P. 295, 776 Schneider WJ, 413 Schnell R, 890, 906 Schnitzler G, 249, 250, 259, 768 Schnitzler GR, 250, 253, 256, 258 Schnolzer M. 444 Schock H. 9 Schoetz SS, 264 Schofield CJ, 705 Schofield L. 628 Scholtz JM, 793 Scholz TD, 12 Schon A, 168, 171, 172 Schonbaum CP, 407 Schönenberger C, 68 Schoner W. 531 Schoots IG, 562 Schousboe I, 422 Schowen RL, 852, 861 Schrama LH, 501 Schramm VL, 725, 852, 882 Schreiber G, 787 Schreiber SL, 256, 703 Schreibmayer W, xxi Schreiter E, 236, 237 Schrevel J. 279-81 Schriml LM, 555, 556 Schroder HC, 378 Schroeijers AB, 560 Schroer TA, 759, 768 Schuetz EG, 550, 569, 578

Schuetz JD, 556, 564, 565 Schuller HJ, 758, 763 Schulman BA, 363 SCHULMAN H. 473-510: 474-77, 482-86, 489, 491, 492, 495-500, 503, 504 Schulman IG, 315 Schulmeister U, 908 Schulte D, 348 Schultz C. 565 Schultz DC, 265 Schultz GE, 732 Schultz HY, 118-20 Schultz MJ: 559, 595 Schultz PG, 195 Schultz R. 34 Schultz RM, 860, 882 Schultz SC, 835 Schulz A, 54, 57 Schulz JB, 560 Schuman EM, 476, 499 Schuster GB, 52, 56, 58, 59, 61, 62, 64 Schuster H, 168 Schutte BC, 77, 78 Schutzbach JS, 684, 685 Schuurhuis GJ, 552 Schuurman EJ, 567 Schwab G-M, 851 Schwacha A, 347 Schwalbe H, 799 Schwartz AL, 410, 411, 512, 514 Schwartz DA, 655 Schwartz JB, 596, 600 Schwartz JH, 486, 857, 882 Schwartz JJ, 455, 457-59, 463 Schwartz NB, 456, 457 Schwartz S, 394, 407, 414, 421 Schwartz WJ, 318, 319 Schwarz JB, 598, 600, 609 Schwarz K, 121, 122, 123 Schwarz W, 241, 518, 525 Schwarzinger S, 808 Schweitzer BA, 194, 201

Schwemmle M, 391 Schwientek T, 448 Schwitter U. 197 Schwob E, 361, 362, 364, 365 Schwögler A, 66 Schworer CM, 477, 483-85, 487, 490 Sclafani RA, 361, 362, 366 Scott DJ, 232 Scott EC, 899, 903 SCOTT F, 165-89 Scott FH, 175, 177, 180, 182 Scott MP, 253, 626, 758, 761, 775 Scott WG, 901, 909 Scotti C, 722 Sczakiel G. 774 Seabra MC, 412 Seay MB, 295 Seeberger PH, 455, 600, 619 Seeburg PH, 818-20, 823, 826, 827, 835, 840 Seed B, 122 Seefeldt LC, 227, 228, 232, 233 Seelig A, 549 Seelig HP, 758 Seematter S, 361 Segal D, 57 Segawa S, 798 Seghezzi W, 253, 776 Sehgal A, 308, 309, 315 Seidel CAM, 54, 57 Seidl KJ, 122 Seifart KH, 376, 391 Seifert J, 616 Seigneur M, 72, 74, 93 Seiki T. 448 Seimiya K, 414 Seipelt RL, 387, 388 Séité MP, 562 Seitz EM, 74 Seki N, 413 Seki T, 349, 353, 367 Sekiguchi JM, 122 Sekiya K, 652 Self WT, 12

Selin C, 319 Selkoe DJ, 424, 425 Sellati TJ, 639 SELLECK SB, 435-71; 436, 437, 450, 460, 462 Sellers L, 709 Sellers WR, 363 Sellmann D, 231 Selva EM, 461 Selvin PR, 529 Selzer PM, 288, 293-95 Semenov A, 285 Semenov EP, 823, 828 Semenov M, 407, 414, 421 Semenov MV, 421 Semisotnov GV, 798 Semsei I, 391 Sen D. 909 Senay C, 450, 457 SenGupta DJ, 180 Sengupta SM, 261 Senior AE, 546-48 Senn A. 419 Seno ET, 728, 733, 740 Senzaki K, 417 Seo SB, 309, 315 Sepich DS, 460 Sepródi J, 539 Sepúlveda FV, 538, 553 Seraphin B, 167, 173, 175, 181, 183 . Serpersu EH, 531 -Serrano L, 794, 797-801. 806 Serveau C, 286, 288, 289 Serviere J. 318 Servos S, 643 Seshadri S. 427 Setzer DR, 391 Sevenet N. 253, 776 Severn WB, 682, 688 Sevilla MD, 66 Sevilla P, 797, 808 Seydel KB, 292 Seydel U, 652 Seyhan AA, 901, 909

Seylaz J, 319

Shaffer AL, 126

Shafirovich V, 52, 54 Shah VK, 228, 243 Shahied L. 398 Shahsafaei A, 339 Shakhnovich E, 785, 806 Shakhnovich EI, 804 Shaklee PN, 443 Shamoo Y, 137, 139 Shamraj OI, 514 Shan Q, 29, 75, 77, 78, 83, 85, 86, 88, 90 Shan S-O, 874 Shanahan F, 253, 776 Shang Y. 267 Shani N, 574 Shao J, 232 Shao L. 594 Shao X, 260 Shapiro AB, 547 Shapiro JI, 531 Shapiro L, 113 Sharief FS, 156 Sharma K, 334 Sharma RC, 548 Sharma SK, 363 Sharmeen L, 890, 895, 898 Sharom FJ, 547, 549, 553 Sharp PA, xvi Shashkov A, 675 Shastry MC, 791 Shaw E, 280, 284 Shaw GD, 604 Shaw MK, 289 Shaw S, 595 Shaw WV, 663 Shchepetov M, 672 Shea JE, 785 Shearman LP, 309, 310, 312 Shechter DF, 346 Shefer S, 573, 574 Sheils C, 194 Sheils CJ, 201 Sheldon M, 413, 416, 417, 425 Shell DJ, 488 Shellman Y, 362 Shelton J, 413, 415, 416, 419, 423, 427

Shen BH, 641

Shen CK, 376 Shen HM, 38

Shen K, 482, 487, 500, 501 Shen S, 319 Shen T. 461 Shen X, 21-24, 29, 41, 199, 758, 759, 763 Shen XT, 249, 250, 252 Shen Z-X, 562 Shenai BR, 284, 285, 298 Sheng M. 423 Sheng Z, 411 Shenk JL, 578 Shenkar R. 194 Shenolikar S, 484, 485, 487, 491 Shepard RL, 561 Sherattt DJ, 20, 29, 31, 35 Sherburne R, 671 Sheridan E, 776 Sherman DH, 705, 723, 724, 730, 737, 738 Sherman IW, 282 Sherman NE, 40 Sherratt DJ, 72 Sherry JMF, 474 Shevchenko A, 378, 381, 383, 389, 390 Shevtsov S, 452 Sheward WJ, 319 Shi H, 376, 381, 384, 390, 391, 394, 396 Shi J, 897, 898, 903, 910 Shi ZZ, 446, 450, 460, 462 Shiau CY, 705 Shibaev VN, 687 Shibata S, 314, 316, 318, 449 Shibata T, 85, 86, 93, 124 Shibutani S, 64 Shields J. 575 Shigeyoshi Y, 326 Shih I, 888, 895, 901, 902 SHIH I-H, 887-917; 6, 890, 895, 902, 904, 905, 910 Shih TA, 107 Shiloach J, 255

Shima M, 411 Shima S, 236 Shimakawa H, 449 Shimane M. 255 Shimazu R, 639 Shimba S, 166 Shimizu K. 41 Shimizu Y, 595 Shimomura K, 309, 310 Shimomura M, 68 Shimomura T, 145 Shimon MB, 512 Shin DS, 124, 545 Shin EK, 122 Shin JM, 524 Shin Y, 605, 611 Shinagawa H, 23, 28 Shinkai A, 200, 216 Shinkai Y, 40, 110 Shinohara A, 74 Shinoura Y. 21 Shiomi Y, 145 Shionova A, 420 Shippy R, 908 Shirahige K, 339, 340, 365 Shiraishi K, 365 Shirakawa M. 458, 459 Shirakawa T, 319 Shiroki K, 377, 391 Shivji MKK, 32, 145, 148, 155 Shockett PE, 103, 118 Shogren R, 596 Shooter EM, 413 Shore V. 573, 574 Short SA, 838, 859, 861-64, 866, 871, 873, 876, 878, 879, 882 Shortle D, 799, 800 Shostak K, 861, 870 Shotton DM, 596 Showalter AK, 200, 213 Shriver Z, 437, 455 Shroyer NF, 570 Shtilerman MD, 792 Shu HH, 171 Shu MD, 390 Shukla D, 443, 444, 455

Shulenin S, 573 Shull GE, 512, 514 Shumann RR, 639 Shworak NW, 444, 455. 457-59, 463 Sibley LD, 279, 280 Siddiqui A, 384, 392, 397 Sideraki V, 839 Sides GD, 704 Siebbeles LDA, 56, 57 Siede W, 21, 29 Siefert JL, 227 Siegel-B, 862, 863, 865 Siegel G, 426, 427 Sif S, 250, 252, 253, 257, 259, 262, 264, 265, 267, 758, 759, 764, 767, 768 Sigel EA, 769 Sigurdsson S, 85, 88 Sijwali PS, 284, 285, 298 Sikic BI, 553 Silbert JE, 436, 453, 456, 457 Silva AJ, 476, 477 Silva AM, 283, 284 Silva SG, 286 Silva T, 823, 828, 835 Silver DL, 572 Silver DP, 111 Silver LL, 639, 642, 652 Silver R, 315, 316 Silver RP, 683, 688 Silverberg I, 449 Silverman JA, 553 Silverman RB, 864, 865 Silvian LF, 20 Sim ATR, 486 Simancek P. 339, 354 Simerly C, 774 Simha D, 201 Simon CM, 579 Simon JA, 41 Simon MN, 346 Simon TL, 665, 666 Simone AA, 823 Simons FHM, 377, 379, 381, 384, 389

Smith PR, 377

Simons K. 426, 427, 626 Simons KT, 797 Simons M. 426, 427 Simonson T, 86 Simos G, 390 Simpson RT, 355 Sims TN, 626 Sina JF, 554 Sinaÿ P. 455 Singer B, 193, 194 Singer HA, 477 Singer MS, 605 Singer RH, 177, 179, 183, 390 Singh A, 284, 285, 298 Singh M, 556, 675, 908 Singh N, 125, 570 Singhal RK, 150 Singla SI, 491, 492 Single FN, 825, 826, 829 Singleton DA, 863, 865 Singleton JW, 79 Sinha A, 445, 446, 448 Sinha N, 22 Sinha P. 356 Sinn E, 37 Sinnott ML, 857, 882 Sinnwell V, 731, 739 Sintchak MD, 236, 237 Sivaram P, 444 Siwkowski A. 908 Sjöback R, 86 Sjoberg B, 77 Skarnes WC, 407, 414, 421, 460, 461 Skiba MC, 83 Skibbens RV, 35 Skillman AG, 284 Sklar P. 835 Skopek TR, 554 Skurnik M, 636, 647, 674-76, 682, 717, 722 Slamon DJ, 553 Slater AF, 282 Slauch JM, 685 Slavov D, 819

Sleckman BP, 103, 125

Slim G, 889 Sloane DL, 199 Slobbe RL, 395 Sloof P. 818 Smagula CS, 181 Smale ST, 257 Smalheiser NR, 416 Smart RS, 52 Smeets PHE, 565 Smets P, 688 Smil V, 227 Smiley JA, 861, 863, 864, 870, 871, 874 Smirnova I, 636, 639, 641 Smit JJM, 549, 550, 553, 554, 567, 568, 650 Smit JW, 551, 556, 575, 576 Smith AA, 876, 878 Smith AJ, 548, 550, 552, 553, 561, 567, 568, 570 Smith BE, 227, 228, 456, 457 Smith BM, 703 Smith BT, 75, 76 Smith CA, 24, 66 Smith CD, 771 Smith CE, 282, 283, 285 Smith CL, 342 Smith CW, 831 Smith D, 176, 899 Smith DA, 785 ·Smith DS, 420 Smith EJ, 315 Smith GCM, 121, 122 Smith GR, 92 Smith HS, 337 Smith JA, 412, 703 Smith JB, 894 Smith JE, 834, 836 Smith JL, 224, 491, 492 Smith KD, 639 Smith LA, 823, 828 Smith LJ, 799 Smith ME, 604 Smith MK, 484, 485 Smith MM, 547 Smith P, 336, 339 Smith PL, 615

Smith R. 286 Smith SB, 787 Smith WB, 499 Smyth MJ, 553, 554 Snader KM, 747 Snaith HA, 354 Snaith MR, 578 Snider MJ, 855, 859, 863, 864, 866, 871, 873, 876-79, 882 Snipes CE, 709 Snowden CM, 122 Snyder AZ, 560 Snyder DS, 659 Snyder GE, 529 Snyder S, 319 So WV, 309 Soares HD, 416 Sobacchi C. 121 Sobel SG, 377, 378, 381, 383 Sobol RW, 150 Socci ND, 785, 796 Soceneantu L, 545, 547 Soderling TR, 475, 476, 483-91 Sodhi MS, 828 Sodi S, 643 Sofia HJ, 725 Soga H, 723 Sogo JM, 341 Sokal EM, 568, 569 Sokol S. 421 Sokoloff L. 319 Solari F. 257 Soldau K, 639 Soler-Gonzalez AS, 787 Soll D, 172, 175 Solomon EI, 222 Solomon NA, 356 Soltis SM, 228 Somers WS, 604 Somersalo K, 626 Somerville CR, 655 Somerville JE Jr. 643

Sommer B, 823, 826

Sommer S, 21, 22, 27, 29

Somoza JR, 710 Sondermann P. 378, 395 Sondhi D, 611 Sonenberg N, 379, 381, 384, 391-93, 397, 498 Song BW, 85, 88 Song EJ, 308 Song HH, 460 Song KS, 427 Song O, 180 Song O-K, 715 Song W-C, 558 Soni A, 199 Sonneveld P, 553 Sopher BL, 411, 415 Sorensen CS, 351, 354, 363, 364 Sorensen PG, 642 Soria JP, 420 Soriano P, 415-17 Sørlie M, 228 Soroka CJ, 563, 577 Sorrentino BP, 554 Sosnick TR. 176, 790, 792, 799, 809 Soteriadou KP, 296 Sotiropoulos A, 777 Sottrup-Jensen L, 411 Soukup GA, 900 Soutar AK, 427 Souto-Padron T. 286 Souza AE, 293 Sowers LC, 201, 214, 578 SPADARI S, 133-63; 141, 144, 146, 150 Spangberg K, 394 Spangler NJ, 243 Spanopoulou E, 111, 121 Sparidans R, 558, 559, 563 Sparks KE, 562 Sparreboom A, 551 Spear PG, 443, 455 Spector S, 789 Speelman P, 559 Speicher D, 820, 835 Spellman MW, 595 Spencer FA, 35 Spencer J, 38

Spengler SJ, 193 Spessert R. 319 Speth V, 688 Speyer JF, 819 Spicer EK, 85 Spichty M, 52, 54-56, 197 Spielhofer P, 831 Spillmann D, 439, 443, 444 Spiro RG, 437 Spits H, 107 Spitzfaden C, 168 Spitzner J, 819 Spivey DI, 52 Spokony R, 407, 414, 421 Spormann M, 54, 56 Spouge JL, 341 Spradling AC, 336 Spratt C. 319 Spratt TE, 194, 209 Sprengel R, 819, 820, 823, 826, 835 Spring H, 563 Spring J, 436, 437 Springer GF, 600 Springer TA, 407, 414 Sprong H, 548, 553 Squire JA, 461 Sreekumar KR, 643 Srikrishna G, 456 Srinivasan M, 477, 497, 499, 500 Srinivasan R, 800 Sriram S, 309 Srivastava DK, 36, 147, 149, 155 Staatz W, 460 Stachelhaus T. 705 Stachula SA, 642 Stadie TR, 609 Stadler P, 731, 739 Stadtman ER, 7 STADTMAN TC, 1-16; 6-13

Staehling-Hampton K, 775,

Stafford WH, 278, 279

Stagliar I, 134, 141, 145

776

Stahlberg A, 772

Stainier DYR, 461 Staknis D, 309 Stamato T, 122 Stamenkovic I, 412 Stamp G, 122 Stams T, 168, 179 Standing KG, 289, 290 Stanewsky R, 309 Stanfield RL, 614 Stanhope-Baker P, 126 Stanislavsky ES, 659 Stankovic T. 124 Stankovich MT, 714, 715 Stanley KK, 410 Stanley PL, 661 Stanley SL Jr, 292 Stannard AK, 427 Stannek P. 421 Stanyon CA, 774 Stark NH, 773 Starman R, 675 Stasiak AZ, 22, 25, 77, 79, Stathopoulos C, 170, 172 Stauber DJ, 439 Staudinger JL, 579 Staunton J, 705, 736 Staunton JU, 736, 740 Staveley BE, 445, 461 Staver MJ, 720, 722 Stec WJ, 889, 898, 906 Steczko J, 224 Steegborn C, 378, 395 Steeghs L, 637, 643, 652 Steen SB, 106, 109, 111, 121 Steenken S, 54, 57, 59, 60, Stefano JE, 376, 377, 388, 389, 394, 395 Stefansson S, 422, 425 Steffens GJ, 9 Steger DJ, 257, 264, 763 Stein A. 728 Stein DC, 671 Stein MA, 661 Stein PL, 417 Stein WD, 522, 547, 548

Strecker G, 688

Streeter PR, 608

Steiner LA, 110 Steinert HC, 579 Steitz JA, 169, 376, 377, 379, 387-90, 394, 899 Steitz TA, 80, 83, 84, 136, 137, 138, 139, 169, 211, 899, 908 Stemp EDA, 63 Stenberg RM, 381, 396 Stenstrom C, 253 Stenzel W, 598 Stephan S, 145 Stephen RJ, 360 Stephens DS, 660, 671 Stephens OM, 835, 841 Sterling CR, 281 Stern D, 105 Stern MH, 106, 764 Stetter KO, 645, 652 Stevens CF, 476 Stevens K. 684 Stevenson G, 679 Stevenson I, 772 Steward A. 802 Steward O, 498, 499 Stewart AF, 254 Stewart GS, 124 Stewart J. 343 Stewart SE, 358 Stewart V, 107, 110 St. Hilaire P, 294 St. Hilaire PM, 294, 295, 595 Stickens D, 446 Stiefel EI, 233, 235, 240 Stieger B, 566, 569, 576, 579 Stierhof YD, 295 Stillman B, 134, 141, 335-37, 339, 340, 342-46, 349, 355, 358, 359, 361-66 Stillman DJ, 381, 383, 758, 763 St. Johnston D, 499, 835 St. Michael F, 672

Steinberger R, 861

Steinborn G. 21

Stocker BAD, 673, 676, 685 Stockert S. 741 Stockinger W, 413, 415, 416, 427 Stockmann M. 739 Stoddard BL, 838 Stojiljkovic L, 774 Stoka V, 286 Stokes DG, 256 Stokin GB, 418 Stokkan KA, 311, 316, 317, 321, 326 Stolarsky T, 292 Stolc V. 167, 173, 175, 178 Stole E, 84 Stoll MS, 595 Stolzer AL, 673 Stone PH, 308 Stone R, 860, 882 Stonik JA, 573 Stoops JK, 479, 481, 482, 489 Stoppini L, 476 Storb U, 38, 39, 105, 107 Storey DG, 670 Story RM, 80, 83, 84 Storz G. 399 Stout AM, 358, 365 Stout CD, 241 Stow JL, 452, 456 Stowell MHB, 228 St-Pierre MV, 569 Strack S, 487, 501, 503 Strahl BD, 248, 266 Strajbl M, 871 Strating H, 685 Stratton SA, 75, 85, 88 Straub T, 250, 254, 255, 258 Straub TS, 860 Straus AH, 437 Straus DC, 662 Strausfeld U, 352, 353 Strauss B, 74, 194, 201 Strauss BS, 201 Strauss JH, 394 Strautnieks SS, 569

Strazielle N, 560

Stockel B, 577

Stribinskis V, 171 Strickland DK, 406, 411, 412, 417, 422, 423, 425 Strickland S, 423 Stringer SE, 444 Strittmatter WJ, 424, 425 Strobel SA, 899, 905, 907, 908, 910 Strober BE, 761, 775 Stroeher UH, 684, 712 Strogatz SH, 311 Strohner R, 255 Stroick M. 426, 427 Strom S, 578 Strominger JL, 707, 711, 712 Strop P, 226, 228 Strous GJ, 410, 595 Stryer L, 485, 486, 488, 491, 492, 495-97 Strynadka NC, 668 Stuart KD, 171 Stubbe J. 703 Stucki M, 134, 141, 145, 146, 148, 150 Studholme RE, 657 Stukenberg PT, 29 Sturiale L, 439 Sturm E, 544, 568, 569 Stutz F, 376 Stutzman-Engwall KJ, 730 Su S-F. 551 Suarez J, 318 Subramanian K, 500 Subramanya HS, 80 Suchy FJ, 578 Sudarsanam P, 111, 249, 250, 251, 764, 775 Sudhof TC, 425 Sueyoshi T, 452, 453 Suga H, 909 Sugahara K, 447-49 Sugawara I, 554 Sugihara H, 682 Sugimoto C, 550

Sugimoto K, 145

,
Sugimoto N, 214
Sugino A, 41, 141, 145, 147,
148, 356, 357, 359-62
Sugiura H, 481, 485
Sugiura M, 460
Sugiyama H, 63-65
Sugiyama T, 682
Sugiyama Y, 544, 550, 562-
64, 566, 577
Sugo N, 151
Sugumaran G, 456, 457
Suh Y-A, 891, 895, 898,
904, 905
Sullivan BM, 452, 456
Sullivan DJ Jr, 282
Sullivan EK, 259, 264
Sullivan JT, 657
Sulo P. 171
Sumi Y, 325, 326
Summerer D, 197, 198, 212
Summers RG, 720, 722
Sun B, 446, 463
Sun D, 564, 565, 569
Sun H, 570, 571
Sun PD, 11
Sun S, 899, 900
Sun WH, 339, 340, 355
Sun XM, 427
Sun Y, 122
Sun ZS, 309, 310, 312
Sunagawa M, 705
Sunazuka T, 704
Sundaralingam M, 895, 900
Sung P, 74, 75, 79, 85, 88,
124
Sureau C, 831
Surerus KK, 228
Susskind M, 659, 670, 682,
683
Sussman JL, 223
Sutin N, 55, 225
Sutter J, 231
Sutton GG, 637, 652, 653
Sutton MD, 41, 75, 76
Suvorov L, 284
Suwan de Felipe K, 643
Suyama M, 381
6 1: 1 2/2 7/1

Suzuki A, 362, 554

Suzuki H, 455, 544, 550,
562-64, 566, 577
Suzuki M, 200
Suzuki T, 500
Svard SG, 177
Svaren J, 258
Svendsen I, 288
Svetlitchnyi V, 236-38
Svitkin YV, 377, 379, 381,
384, 391-93, 396, 397
Swan DC, 453, 454, 463
Swanson AB, 8
Swanson C, 363
Swanson MS, 378
Swanson PC, 119
Swarts HGP, 519, 523, 525
Swarts SG, 66
Swat W, 122
Sweadner KJ, 515, 523, 526
Sweasy JB, 22, 200
Sweatman TW, 705
Sweder KS, 249
Sweet CR, 642, 654, 655
Swiderek K, 758, 759, 761,
769, 772
Swiedler SJ, 452, 453
Swierzko A, 659, 662, 670 Swihart KG, 295
Switzer CY, 79
Synold TW, 579
Syväoja J, 134, 151
Syväoja JE, 141, 144, 147
Szántó I, 552
Szabó G, 559
Szabó K, 568
Szabo MJ, 672
Szakäcs G, 547, 555, 557
Szalai VA, 68
Szczepaniak A, 224
Szigety SK, 92
Szoke A, 909
Szoke H, 909
Szostak JW, 888, 909
Szpirer C, 141
T

Tabak HF, 574

1. II AEE EAA EEO

Tabas I, 411 Tabas L, 561 Tabish M, 256 Taboada E, 672 Tabor S, 211 Taccioli GE, 121, 122 Tacken PJ, 413 Tada S, 341, 345, 350, 351, 353, 354 Tada T, 500 Tada Y, 35 Taddei N. 800 Tae EJL, 195 Taglienti MG, 417 Taguchi K, 326 Taguchi Y, 547 Tahmassebi DC, 214 Tainer JA, 124 Tainton KM, 554 Taipale J, 421 Taira K, 889, 895, 898, 904 - 6Tak YS, 359, 360 Takagaki Y, 107 Takagi J, 407, 414 Takagi Y, 889, 898, 906 Takahara PM, 226, 228 Takahashi H, 512 Takahashi I, 704 Takahashi JS, 309, 312 Takahashi K. 365 Takahashi M, 78, 79, 86 Takahashi N, 340, 349 Takahashi R, 311, 316 Takahashi S, 312, 412, 420, 786 Takahashi T, 337, 339 Takakuwa Y, 298 Takao K, xxi Takasaki Y, 377 Takayama K, 639, 642, 652 Takeda DY, 363 Takeda K. 525 Takeda S, 125 Takeda T, 366 Takei J. 792 Takekida S. 325, 326 Takeshita M, 64, 685, 687

Takeuchi M, 477, 478 Takeuchi O, 636, 639, 641 Takeyasu K, 145, 516, 529 Takikawa H, 563, 564 Takisawa H, 141, 345, 358-60 Tal DM, 512 Talal N. 377 Talbot SJ, 166 Tall AR, 572 Tamada Y, 319 Tamai I, 550, 551 Tamai K, 362, 364, 407, 414, 421 Tamkun JW, 249, 253, 254, 758, 759, 761, 774, 775 Tammur J, 557 Tampé R, 539, 544 Tamura J, 448-50 Tamura S, 487 Tamura T, 13 Tan B, 553 Tan CK, 144 Tan E, 177, 182, 376, 394 Tan EM, 181, 376-78, 381, 396 Tan Q, 378, 383 Tan S, 147 Tanabe M, 554 Tanaka H, 10, 345 Tanaka K, 68, 154, 289, 345 Tanaka M, 308, 319, 455 Tanaka R, 500 Tanaka T, 266, 339, 341, 350, 353, 360, 365, 563, 764, 798 Tanba H, 723 Taneja K, 177, 183 Tanford C, 785 Tang A, 106 Tang J, 604 Tang L, 737, 748 Tang MJ, 21-24, 29, 40, 41, 199 Tanigawara Y, 548 Tanigoshi L, 282 Taniguchi K, 531

Taniguchi M, 461

Taniguchi S, 377, 378, 381, 393 Tank DW, 319 Tanner MS, 569 Tanner NK, 891, 892, 896, 904, 905 Tannich E, 291 Tantillo DJ, 866 Tanzi RE, 411, 415 Tao S, 284 Tao X, 641 Tao-Cheng JH, 482, 500, 501 Tappel AL, 9 Tapping RI, 653 Tarassov I, 388 Targett GA, 284 Tateishi S, 85, 88 Tatemoto K, 477 Tatsumi Y, 339, 340 Tatsumoto T, 771 Tatsuta T, 539 Tawada A. 437, 454 Tawadros T. 419 Tawaramoto M, 41 Tay J, 498 Taylor AF, 92 Taylor C, 66 Taylor DE, 671 Taylor FB Jr. 639 Taylor JC, 538 Taylor JM, 825, 831; 891 Taylor J-S. 21, 22, 24, 29, 34, 66, 155, 199, 832, 890, 895, 898 Taylor ME, 594 Taylor SS, 483 Taylor WH, 445, 448 Taylor WL, 487, 488, 491 Tchernychev B, 602 Tecklenburg M, 366 Tee J. 461 Tegoni M, 239-41 Tei H, 311, 316, 317, 321. 326 Teixeira A, 280 Teixeira AR, 281 Tekos A, 170, 179

Tekotte H, 437 Temple B. 868 Tempst P, 251, 252, 257, 758, 759, 764, 766, 769 ten Hove J, 643 Tenenbaum SA, 399 Teng B, 40 Tepper AD, 554 Terada T. 85 Terao T, 551 Terasaki T, 550 Terayama K, 448 Tercero JA, 345, 359 ter Meulen V, 823, 831 Terns MP, 388, 389, 394 Ternstrom T, 793 Terry KL, 809 Terry S, 567 Tersariol ILS, 437 Teruel MN, 487, 500 Terwogt JMM, 552 Tessarollo L, 123 Tessman I. 29 Testa JR, 557, 563, 565 Tetley L, 293, 294 Tevelev A, 106 Tews DS, 550 Texido G, 39, 155 Thanos D, 266, 267 Thauer RK, 236 The I, 446, 450, 460, 462 Theis K, 147 Thekkumkara TJ, 477 Therien AG, 512, 514, 526, 531 Thermes C, 177 Thibault P, 659, 670, 688 Thiel G, 487 Thiele C. 572 Thijs LG, 659 Thill G, 891, 892, 904, 905 Thirumalai D, 803, 804 Thoma F, 355 Thomas BC, 170, 172, 179 Thomas DC, 41 Thomas JA, 689 Thomas JH, 479 Thomas JR, 594

Thomas MG, 80 Thomas PJ, 649 Thomas R. 684 Thomas S, 446 Thomas-Oates J, 670, 682, 683 Thomas-Oates JE, 657 Thomassen E, 675 Thome KC, 339, 343, 349, 354, 359, 363 Thomford JW, 297 Thommes P, 345, 348 Thompson BG, 652 Thompson CB, 103, 110, 116, 125, 519, 525 Thompson JE, 905, 908 Thompson MR, 411 Thompson NA, 419 Thompson NL, 626 Thompson PA, 787 Thompson TB, 80 Thomson AJ, 239, 240 Thomson JB, 903 Thorgeirsson SS, 553 Thorne PS, 655 Thorneley RNF, 228, 231, 232 Thornewell SJ, 524 Thorp HH, 60, 68 Thorp SC, 437 Thorson JS, 705-7, 709, 711, 712, 714, 715, 720, 735, 738, 746 Tian H. 309, 479, 573 Tian J, 531 Tiberi F, 288 Tien D, 342, 351, 364 Tiganis T, 479, 483 Tilney LG, 289 Timans JC, 639 Timmis KN, 681 Timsit Y, 113 Tindall KR, 199 Tinoco I Jr. 177, 201, 903 Tint GS, 422, 573, 574 Tippin B, 18, 32, 34, 39, 40 Tissier A, 34, 36, 38, 154, 155, 158

Tiwari N, 145 Tjoelker LW, 107 To WY, 289 Tobias PS, 639, 641 Tobimatsu T, 477, 479 Tobler H. 257 Tocchini-Valentini GP, 172 Todorov IT, 334, 337 Toenjes KA, 771 Toh EA, 381 Toh KL, 310 Toh S. 563 Toh-e A, 381, 383 Tohgo A, 555 Tohyama M, 498 Toida T. 453 Toivanen P. 674, 675, 682 Tokumitsu H, 475 Tokuriki M, 560 Tolbert TJ, 625 Tolias PP, 376, 381 Tollervey D, 167, 173, 175, 178, 181, 376, 377, 384, 386, 387, 394 Tom S. 615 Toma L, 437, 452 Tomas AM, 286 Tomasiewicz HG, 420 Tomasini-Johansson B, 446, 452, 462 Tombes RM, 477, 501 Tomer G, 22, 24, 25 Tomita K, 861 Tomiyama T, 424 Tomizawa J, 124 Tomlinson S, 289 Tommassen J, 637, 652 Tommerup N, 414 Tone Y, 448, 450, 457 Tonegawa S, 104, 107, 110, 116, 125, 476 Toney MD, 855, 861, 882 Tong JK, 256 Tong RT, 61 Toole BP, 625 Toorchen D, 194 Tooyama I, 413 Topal MD, 193, 194

Topczewski J. 460 Topfer F, 376, 379, 396 Topham D, 554 Topper JN, 167 Torgov VI, 682 Torii M, 279 Torkkell S, 722 Tornus D, 712 Tosolini A, 557, 563, 565 Toth EA, 20 Totty NF, 818 Toulme JJ, 77 Tournebize R, 641 Toustrup-Jensen M, 525 Tower J, 336 Townsend CA, 705 Toyoda H. 445, 448, 450. 453, 461, 462 Toyoshima C, 512, 513, 516, 524, 526, 527 Toyota H, 704 Tracy RB, 77, 87 Tran HT, 144 Tranguch AJ, 166, 175-78 Trapp BD, 427 Tratner I, 140 Traut TW, 861, 862, 868, 872 Trautmann M. 659 Travis GH, 570, 571 Trefzer A, 705, 707, 741, Treisman JE, 254, 775 Treisman R, 777 Treitel MA, 758 Tremethick DJ, 255 Trent MS, 644, 645, 647, 648 Tresco PA, 315, 316 Treuheit MJ, 516 Treuheit S, 257 Trezise AEO, 553 Trigatti B, 406 Trimarchi JM, 31, 32 Trincao J. 20, 154 Trinczek B, 420 Trojanowski JO, 424

Trommsdorff M, 411, 413-17, 419-21, 423, 425, 427 Tronche F, 311, 316 Tronchet JF, 703 Tronchet JMJ, 703 Tropé CG, 552 Troster H. 391 Troullier A, 798 Trowsdale J, 120 Trowsdale L, 539 True HL, 172, 178, 179 Trujillo K, 85, 88 Trujillo KM, 124 Trumbach B, 572 Truscott SM, 231 Trust TJ, 683 Trybala E, 443 Tsagla A, 170 Tsai AL, 491 Tsai CS, 861 Tsai L, 7, 12 Tsai LH, 420 Tsai MD, 200, 213 Tschuch C, 567 Tschudi C, 376, 377, 379, 381, 383 Tse C, 262 Tsien RW, 476, 484, 485 Tsien RY, 772 Tsikaris V, 296 Tsirka SE, 423 Tsodikov OV, 25, 78, 85 Tsuboi A, 119 Tsuboi S, 596 Tsubouchi H, 124 Tsuchida K, 448, 449 Tsuda M. 460 Tsuji A, 550, 551 Tsujimoto M, 451-53 Tsukada M, 383 Tsukiyama T, 254, 255, 257, 264, 265, 267, 758, 767 Tsurimoto T, 339, 340 Tsurumi T, 352 Tsuruo T, 550

Tsuruoka H. 823

Tsuzuki K. 704

Tu H, 578 Tu SJ, 832 Tuchweber B, 570 Tuck S. 407 Tucker PW, 251 Tuerk C, 177 Tufaro F, 450, 451, 456, 457, 462 Tugal T, 339, 349 Tullo A, 171, 181 Tumey LN, 639, 642, 652, 653, 655 Tumyan L, 519, 525 Turco SJ, 461 Turek FW, 321, 327 Turgeon DK, 579 Turi ZG, 308 Turk B, 286 Turk V, 286 Turley SD, 426, 573, 577 Turnbull JE, 437, 439, 444 Turner AJ, 427 Turner BM, 257 Turner DC, 8 Turner DH, 214, 910 Turner F. 198 Turner J, 21, 40, 145, 146 Turner RM Jr. 199 Turner TK, 253 Turro NJ, 52 Tusnády GE, 557 Twells RC, 413 Tyas L, 283, 284 Tye BK, 348, 356, 357, 361, 362 Tyers M, 427 Tykocinski ML, 628 Tyler JK, 249, 250 Tyryshkin AM, 242 Tyson CA, 577 Tytgat GNJ, 569 Tzekov RT, 570, 571 Tzinia AK, 296 Tzschaschel BD, 681 U

Uchida K, 653

Uchiumi T, 563 Uchiya K, 682 Uchiyama M, 359 Uchiyama T, 639, 642, 652, 653, 655 Uchiyama Y, 346 Udgaonkar JB, 790 Udvarnoki G, 740, 741 Ueda K, 547, 548, 553 Uematsu N, 33, 158 Uenishi K. 474 Ueno M, 448, 449 Ugele B, 293, 294 Uges DR, 575 Uhlenbeck OC, 890, 891, 897-901, 903, 909 Uhlmann F, 145 Uitto J, 567 Uitto L, 141 Ujhazy P, 576 Ulevitch RJ, 636, 639, 641 Uljon SN, 671 Ullrich R, 412 Ullsperger C, 29, 74, 95 Ullsperger CJ, 86 Ullu E, 376, 377, 379, 381, 383 Ulyanov NB, 79 Umar A, 41, 198 Umbenhauer DR, 550, 551, 554, 555 Umezu K, 29, 861 Underbrink-Lyon K, 171 Underhill DM, 639 Unger E, 453 Unk I, 32, 34, 41, 153, 156 Unkelbach U, 578 Unligil UM, 668, 685 Unverzagt C, 616, 618 Upadhyaya P, 558, 559 Upholt WB, 544 Ura K, 250, 257 Urban Z. 567 Urbanova P. 531 Urbatsch IL, 546, 548 Urny J, 414 Urquidi V, 477 Urushihara M, 501

Usman N, 906, 909, 910, 912 Usui T, 124 Usukura J, 145, 346 Utermann G, 424 Utley RT, 763, 767 Utsumi H, 444 Utz PJ, 377, 378, 393

Vaara M, 641, 644, 652, 661

Vaena de Avalos S, 281

V

Vaidy VM, 860, 882 Vaisman A, 34 Vaisman BL, 572 Valent B. 766 Valentin K, 655 Valentine SJ, 222 Valla S, 454 Valle D, 574 Valvano M, 636, 647, 676 Valvano MA, 663, 665, 666, 675, 676, 678, 688, 689, 717 Valverde MA, 538, 541 Van NT, 705 van Alphen L, 643 Vanaman TC, 474 Van Asperen J, 550-52 Van Aubel RAMH, 562, 565 van Berkel WJH, 715 Van Blitterswijk WJ, 554 Van Boom JH, 818 Van Bruggen EF, 544 Van Calsteren MR, 705 Van Deemter L, 548-51, 553, 554, 560-62, 564 van den Berg BM, 411, 810 Van den Berg DJ, 549, 560 Van den Berg M, 574 VandenBerg SR, 413 Van Den Boom V, 249, 250 Van Den Born J. 453 Van den Bosch L. 673, 679 Van den Brule S, 148 Van den Burg J, 818

Van den Heuvel-Eibrink MM, 553 Van den Steen P, 450 van de Putte LB, 377 van der Drift K. 657 van Der Geer P, 427 van der Heijden A, 377. 378, 381, 393, 396 Van der Holt B, 553 Vander Jagt DL, 286 van der Kemp A, 389 van der Ley P, 637, 643, 652 Van der Linden M, 548, 563, 564, 566 van der Meer JW, 639 van der Meide PH, 831 Van der Sandt ICJ, 550 van der Spek T, 233 Vanderstraeten S, 148 Van der Valk M, 560 Van der Valk P, 560 van Deuren M, 639 van de Vijver MJ, 552 van Dijk KW, 413 van Döhrer H, 705 van Dongen JJ, 126 Van Dorsselaer A, 609 Van Dyke M, 703 van Eenennaam H, 166, 167, 173, 182, 183 Van Eijk MJT, 557, 563 van Gastelen MA, 555, 556 Van Geer MA, 560, 562 Van Gennip AH, 562 van Gent DC, 111-14, 119, 126, 149 van Helvoort A, 544, 548, 553, 560, 568, 650 Van Holde KE, 261 Van Horn DJ, 376, 381, 384, 390, 391, 394, 396 VanKanegan M, 261 Van Kuppevelt T, 446, 463 van Lenten L, 707, 708 van Leusden MR, 559, 560 Van Loevezijn A, 556 Van Marle J. 568

van Meer G, 553, 560, 568 van Mierlo CPM, 715 Van Montfoort JE, 544 Vannier-Santos MA, 287, 293 Van Nieuwkerk CMJ, 568-70 Van Os CH, 562 Van Roermund CW, 574 Van Sloun PPH, 32 Van Tellingen O, 549-52, 554 van Tol H, 889 Van Tuyle GC, 172 Van Veen HW, 544, 545. 547 Van Velkinburgh JC, 647, 648 van Venrooij WJ, 166, 167, 173, 182, 183, 377-79, 381, 384, 389, 393, 395 Van Waardenburg RCAM, 555 van Wageningen AMA, 722 Van Wijland M, 568 Van Wijland MJ, 570 Vanzin GF, 445 Vara JA, 707 Váradi A, 547, 557 Varani G, 177, 378 Varga-Weisz P, 249, 768 Varga-Weisz PD, 163, 250, 255, 257, 355, 758 Varki A, 444, 453, 594, 595, 703 Varki NM, 444 Varma R, 626 Varon R, 123 Varticovski L, 576 Vas A, 352, 363, 364 Vashee S. 339 Vasilets LA, 518, 525 Vaskinn S, 565 Vasseur M, 891 Vassilev A, 254, 255, 257, 264, 267 Vatanen K. 712

Vater J, 705

Vaughn JC, 823 Vaze MB, 80, 84 Vazquez M, 775 Vazquez-Laslop N, 549 Veenhof E, 671 Veeranna, 420 Velotta JB, 525 Venables PJ, 377 Vendeville S, 281 Venditti P. 254, 257 Venema K, 545 Venkataraman G, 437 Venter JC, 594 Verdine GL, 211 Verdone L, 388, 389 Veres Z. 12 Verhey KJ, 419 Verkade HJ, 575 Verkaik NS, 126 Verkoczy LK, 40 Verma DJ, 685 Verma NK, 685, 687, 716, 717 Vernède X, 233, 235 Vernhet L, 562 Verrijzer CP, 254, 264, 774 Verseck S, 728 Verselis LM, 479 Versteege I, 253, 776 Vertel BM, 456 Vervoordeldonk MJBM, 559 Vervoort J, 715 Vesting MM, 708 Vestweber D, 602 Vey M, 626 Vidal VP, 388, 389 Vidrio S, 318 Vignais PM, 233 Vignali M, 249, 250, 258, 259, 759 Viguera AR, 797, 799-801, 806 Viguera E, 72, 74, 93 Vilbois E, 113

Vilela C, 574

Villa J, 871

Villa A, 118, 121

Villa F, 446, 463

Villey IJ, 103, 119, 120 Villringer A, 319 Vilpo JA, 145, 148 Vilsen B, 523, 525 Vinade L, 501 Vincent JL, 639, 641 Vincent KA, 114, 117 Vindurampulle C, 678, 679 Viney JL, 550, 562 Vinh T. 653 Vinogradov E, 659, 661, 662, 667, 670, 684 Vinogradov EV, 657 Vinson V, 756 Vioque A, 166, 171, 172 Virshup D, 310 Vissel B, 827 Visser M, 619, 621 Vissinga C, 123 Vitaterna MH, 308, 309 Vivés RR, 437, 439 Viviano BL, 460, 461 Vliegenthart JFG, 449 Vo QD, 553 Vogel HJ, 485 Vogel O, 562 Vogel SN, 636, 657, 676 Vogels I, 553 Vogelzangs JHP, 167, 173, 183 Voigt J, 411 Voitenleitner C, 148 Vojta P-J, 156 Vojtek AB, 715 Volbeda A, 235, 236 Volk EL, 556 Volker M, 33, 34, 43, 154 Volmer A, 487 Vologodskii AV, 29, 74, 95 Voloshin ON, 84 Volovyk ZN, 626 von Ahsen U, 703 von Bergen M, 420 Von Bergmann K, 573 Von Delft F, 439 von Heijne G, 525, 530, 612 von Hippel P, 85 Vonk RJ, 575

Von Richter O, 554, 579 von Zelewsky T, 257 Voorwinden HH, 550 Vore M, 562, 575, 576 Vorum H, 412, 422 Vos CMP, 550 Vos HL, 595 Vos JC, 544, 546 Voskoglou-Nomikos T, 564 Vossebeld PJM, 553 Voth BR, 295 Vugmeyster L, 789

W

Wächtershäuser G, 222 Wada A, 757, 774 Wade PA, 250, 254-58, 261, 768 Wadkins TS, 888, 890, 891, 894, 895, 901, 902 Waga S, 134, 141, 335 Wagenaar E, 548-51, 553, 554, 567, 568, 650 Wagener C, 343 Wagenknecht, HA, 63 Wager-Smith K, 309 Wagg J, 522 Wagle N, 250 Wagner J, 23, 29 Wagner K, 248 Wagner PD, 497, 498 Wagner RW, 834, 836 Wagner SD, 103 Wagner WD, 444 Wahba AJ, 819 Wahl HP, 739 Wainwright LM, 253 Wakamatsu H, 312, 314, 316 Wakarchuk WW, 660, 668, 671, 672 Waksman G, 210, 211 Walaas SI, 497, 498 Walch-Solimena C, 377, 381, 386, 394, 396, 772 Waldburger CD, 794, 795, 803

Waldmann H, 628 Waldmann R, 491 Waldrip WR, 445, 448, 462 Walikonis RS, 483 Walker AM, 319 Walker C. 460 Walker GC, 20, 21, 23, 28, 29, 41, 75, 76 Walker JE, 83, 379 Walker JL, 552 Walker JR, 122 Walker S, 703 Wall FE, 453 Wall JB, 478 Wallberg AE, 163, 257, 264, 763 Wallis DE, 423 Wallis SC, 818 Wallon G, 798 Walsh AG, 662, 667 Walsh CT, 747 Walsh EC, 461 Walsh JA, 290 Walter F, 903 Walter JC, 344, 348, 353, 354, 357, 359, 361, 362, 364 Walter NG, 897, 898, 901, 903, 909, 910 Walter P, 678 Walters LM, 456 Walther D, 412, 422 Wan C, 52, 54 Wan KM, 757 Wandel C, 550 Wander JD, 706, 731 Wang AX, 522 Wang B, 342, 343, 363 Wang C, 114 Wang CC, 199, 289 Wang CJ, 832 Wang E, 554 Wang EH, 579 Wang F, 121 Wang G, 671 Wang HB, 249, 250, 255-57, 264, 360, 437, 439,

578, 644

Wang HM, 444 Wang J, 137, 139, 211, 479, 758, 759, 763 Wang JC, xv Wang JKT, 487 Wang JM, 611 Wang JN, 525 Wang JY, 421 Wang K-S, 890 Wang L, 253, 292, 675, 678 Wang M, 24, 35, 153 Wang N, 572 Wang Q, 820, 825 Wang R, 570, 671 Wang S-F, 707, 709, 901, 903 Wang SG, 519 Wang TS, 140, 147 Wang W, 255, 758-61, 767, 769, 772, 776 Wang WD, 256, 257 Wang X-D, 32, 155 Wang XH, 446, 463 Wang XY, 34, 154 Wang Y, 84, 476, 641, 818, 820, 839, 840 Wang YH, 519 Wang Y-J, 890 Wang YL, 177, 181, 183 Wang ZG, 32, 34, 36, 148, 155, 157, 199, 461, 479, 619, 621 Wang ZH, 32, 35, 157 Wanner G, 310 Warashina M, 889, 898, 906 Warbrick E, 145, 146 Ward DG, 531 Ward JM, 420 Ward KL, 569 Ward SA, 283 Ward W, 282 Ware ML, 416 Warman ML, 445 Warnecke JM, 170, 179 Warren PV, 652, 653 Warren S, 861 Warren WD, 116 Warshawsky I, 411

Washington MT, 32, 33, 38, 40, 153-56, 348 Wasielewski MR, 52, 54, 55, Wassarman KM, 399 Wassink H, 228 Wata Y, 60 Watabe J. 625 Watanabe Y, 410 Watkins JB III, 576 Watkins PA, 574 Watmough NJ, 239 Watson DC, 671, 672 Watson JB, 391 Watson KL, 774 Watson RR, 731 Watt GD, 231 Watt JL, 655 Watt SR, 662 Waxham MN, 479, 481, 482, 484, 485, 487-89, 491, 497, 498 Weatherly SC, 60 Weaver DL, 803, 805-8 Weaver DR, 309-12, 315, 326, 413 Weaver DT, 105, 121-23 Weaver TM, 232 Webb BL, 29, 77, 78, 85 Weber IT, 80, 83, 84 Weber K, 376, 381, 383 Weber V, 769 Weber W, 411 Weber-Ban EU, 785, 810 Webster HdF, 319 Webster P, 280 Weckesser J. 654 Wedekind JE, 735, 888, 900 Weeds A, 757 Wehland J, 415 Wehman AM, 415 Wehrli M, 407, 414, 421 Wehrly TD, 126 Wei G, 445, 446, 448-51, 455, 459, 460, 462 Wei HM, 574 Wei L, 284

Warshel A, 860, 871

Wei YF, 122 Wei Z, 452, 453 Weidemann A, 424 Weigel PH, 684 Weigel TM, 712, 714 Weikert S. 615 Weill J-C, 38-40, 103 Weinberger RP, 484-86 Weiner AJ, 890 Weinert T, 335 Weinke JL, 445, 446, 448, 450 Weinreich M, 342, 361-63, 366 Weinstein DM, 339, 341, 345, 353 Weinstock GM, 77, 637, 652, 653 Weintraub H, 818, 820, 830, 831, 834, 836 Weirich CS, 264 Weiser JN, 672 Weis-Garcia F. 111 Weisgerber C, 682 Weisgraber KH, 411, 413 Weiss J. 673 Weissbach U. 741 Weissman BE, 776 Weitnauer G. 741 Weitz CJ, 309 Weksberg R, 461 Welch RA, 661 Welker E, 557 Weller JL, 308 Wellinger RJ, 149 Wells D. 498 Wells DG, 499 Wells NJ, 343, 354, 363, 364 Wells TN, 794 Wells WW, 771 Welte W, 652, 690 Wendt-Pienkowski E, 720, 722 Weng J, 570, 571 Weng Z, 553, 554

Wente SR, 772

Wenzel JJ, 578

Weremowicz S, 359 Werner B, 890 Werts C. 653 Weser S. 376, 391 Wesolowski D, 167, 173, 175, 176, 179, 183 Wessely S, 54, 56, 58 West K. 319 West RB, 119 West SC, 74, 79, 84, 86, 90, 92 Westbrook J. 223 Westcott BL, 240 Westerhoff HV, 559 Westermann S, 376, 381, 383 Westgate SA, 487, 488, 497, 498 Westheimer FH, 861, 864, 874 Westhof E, 176, 177, 891, 892, 904, 905 Westin S. 316 Westley J, 454 Westling J, 283, 284 Westmoreland B, xvi Westphal HM, 254, 257 Westphal O, 639 Westrich L, 712, 722 Wetlaufer DB, 802 Wetmur JG, xv Weymouth-Wilson AC, 703, 740 Wharton CW, 231 Wheeler DA, 309 Whitby FG, 290 White KA, 642, 643, 648, 667 White MF, 258, 767, 768 White MM, xx White NL, 564, 565 White O, 637, 652, 653 White SH, 785 White SP, 602 Whitehouse I, 249, 258, 767, 768 WHITFIELD C, 635-700; 636, 647, 657, 659,

661, 663, 664, 667, 669, 671, 673-76, 678, 683-84, 688 Whitis J. 525 Whitmarsh AJ, 419 Whitmire E, 352 Whittaker AJ, 344 Wibbenmeyer JA, 120, 121 Wickens M, 180 Wickham GS, 896 Wickner S, 29 Widlund H. 86 Widmalm G. 684 Widom J. 261 Wieben ED, 388 Wied S. 628 Wieghardt K, 222 Wieland F. 611 Wielinga PR, 558, 559, 563, 565 Wiemer EAC, 553 Wieruszeski J-M, 688 Wiese A, 652 Wiesendanger M, 40 Wigley DB, 80 Wijnen H, 320, 323, 324 Wijnholds J, 548, 549, 555, 556, 559-64 Wiklund L. 394 Wilcox MA, 424 Wild J, 319 Wildegger G, 803 Wilk RR, 809 Wilken J. 609 Wilkes C. 146 Wilkinson B, 705, 736 Wilkinson MC, 439 Will CL, 387, 388 Willams LJ, 600 Wille U, 52, 54 Willems PH, 523, 525 Willett CE, 110 William C, 38 Williams AE, 672 Williams AF, 596, 628 Williams AG, 282 Williams BR, 835 Williams DG, 377

Williams DH, 722
Williams JA, 308
Williams KJ, 436
Williams KR, 85
Williams LJ, 596, 600
Williams NR, 706, 731
Williams S, 411, 417, 423,
787, 800, 806
Williams TT, 56
Williamson JM, 653
Williard X, 281
Willis KJ, 614
Willnow TE, 410-12, 422
Willoughby CA, 501
Wills ZP, 105
Wilm M, 122, 255, 388,
389, 758
Wilmanns M, 797
Wilmans M, 798
Wilmes GM, 346
Wilsbacher LD, 308, 309
Wilson DK, 838, 839
Wilson DS, 888
Wilson ME, 295
Wilson RJ, 278
Wilson SH, 36, 138, 145,
147-50, 155, 200, 210,
211, 213, 215
Wilson TE, 122
Wilson VA, 446, 460, 463
Wilson WD, 62
Wilstätter R, 848, 881
Wiltshire HR, 551
Wilund K, 420
Wilusz J, 376, 395
Wimley WC, 785
Winans KA, 598, 605, 608,
611
Wincott FE, 906
Winge DR, 381, 383
Winkler JR, 225, 787
Winkler ME, 615
Winston F, 163, 249-52,
758, 759, 764, 766,
769, 775
Winter DB, 32, 37, 38, 40,
158
Winterfeld GA, 598
Willellelle OA, 370

Wintersberger U, 758, 763, 769 Wirtz G, 736, 740 Wise CA, 171 Wise LD, 551, 554, 555 Wiser MF, 290 Withers SG, 668 Withers-Martinez C, 278, 279 Witke W, 415 Witkin EM, 20, 22, 23 Witt DP, 444 Witt H-T, 242 Wittenberg C, 144, 147 Wittinghofer A, 628 Wittmeyer J, 355 Wittschieben J, 32, 155 Wittung-Stafshede P, 787 Witzgall R, 562 Wlad H, 453 Woessner JF, 276 Wohlert S, 739, 740 Wohlert S-E, 741 Wohlschlegel JA, 344, 353, 354, 357, 363 Wojcik-Jacobs E, 544, 546 Wolbers MJ, 575 Wolenski JS, 183 Wolf BB, 413 Wolf DA, 342, 343, 351 Wolf J. 821 WOLFENDEN R. 847-85; 838, 850, 852, 855, 857, 859-61, 863, 864, 866, 870, 872, 873, 876, 877, 879, 880, 881 Wolfer DP, 425 Wolffe AP, 126, 249, 250, 254-58, 261 Wolfle W. 211 Wolin MJ, 6 WOLIN SL, 375-403; 169, 183, 376, 377, 379, 381, 383, 384, 386-91, 394, 396

Winterpacht A, 391

Winters CA, 501

Wolozin B, 426, 427 Wolvers-Tettero IL, 126 Wolynes PG, 796, 803, 804 Wong AKC, 253 Wong CH, 595, 600, 604, 625, 703 Wong DK-H, 679 Wong FM, 864 Wong GW, 446, 452, 462 Wong JM, 256, 257, 758 Wong ML, 74, 289, 290 Wong RO, 419 Wong SK, 833, 836 Wong TC, 823 Wong WKR, 679 Woo AL, 514, 526 Woo CJ, 32, 34, 39 Woo D, 228 Woo PWK, 723 Woo TT, 124 Wood AJJ, 550 Wood JG, 420 Wood RD, 40, 148 Woodage T, 256 Woodcock CL, 248 Woodgate R, 20-25, 27, 29, 34, 38, 40, 41, 75, 134, 135, 151, 154, 155 Woodgate RW, 33 Woodgett JR, 481 Woods A, 436 Wool IG, 177 Woolford JL, 388 Workel JO, 550 Workman JL, 163, 249, 250, 257-60, 262, 267, 758, 759, 763, 764, 767, 768 Wortman JR, 594 Wovchik NA, 378, 383 Wright AP, 163, 257, 678, 687, 763 Wright CD, 563 Wright GA, 66 Wright MB, 356 Wright PE, 799, 800, 807, 808 Wright SD, 639 Wu AD, 363

Wu AM, 93	Xie XZ, 771	
Wu C, 249, 250, 252, 254,	Xie ZJ, 519, 525, 531	Yamamoto S, 326
255, 257, 258, 262,		Yamamoto T, 412
264, 267, 758, 759,	Xie ZW, 36 Xin H 32 154 155	Yamamoto Y, 31
763, 767	Xin H, 32, 154, 155 Yion S M, 562	Yamane T, xv
Wu CF, 479	Xion S-M, 562	Yamano S, 13
Wu FY, 771	Xu HZ, 337	Yamashita M, 365
Wu GE, 106	Xu RM, 346	Yamauchi T, 475, 476, 479,
Wu H-N, 890, 895, 898	Xu YF, xxii	481, 482, 485, 488, 501
Wu JR, 355, 356	Xu YW, 641	Yamazaki H, 414
Wu JS, 248	Xue D, 169, 376, 377, 381,	Yamazaki S, 11, 310, 311,
Wu LC, 309, 318, 321, 327,	384, 386–88, 390, 391, 394, 396	313, 314, 316–18, 321, 326
498, 764	Xue WT, 253	Yamazaki V, 123
Wu M, xvi	Xue YQ, 723, 724, 730,	Yan H, 351
Wu N, 866, 869, 873, 885	737, 738, 758-61, 767,	Yan L, 292, 313, 325, 326
Wu R-L, 553	769, 772, 776	Yan LY, xxi
Wu SM, 148	Xue YT, 253, 256, 257	Yanagi K, 358, 360
Wu TF, 52, 54		Yanagida M, 346
Wu W, 421	Y	Yanagishita M, 456
Wu WM, 861, 864		Yancey-Wrona JE, 78
Wu XH, 32, 34-36, 122,	Yabe T, 455	Yancopoulos GD, 125
148, 153–55, 199	Yablonski MJ, 861, 862	Yandell MD, 594
Wu YB, 68, 660	Yadav D, 201	Yaneva M, 121
Wu YQ, 195	Yadav PNS, 200	Yanez L, 318
Wu YY, 672	Yadava N, 296	Yang CC, 876, 878
Wulfkuhle JD, 773	Yager TD, 261	Yang CH, 556
Wyckoff TJO, 639, 641,	Yagi K, 474	Yang DF, 253, 559, 560,
642, 654	Yagi T, 417	562, 758
Wyllie DH, 652	Yahara I, 757, 774	Yang E, 484, 489
Wyne KL, 412	Yakhyaev AV, 411	Yang H, 460, 670
Wyrick JJ, 251, 340	Yaklichkin SY, 412	Yang IV, 60
Wyss DF, 614	Yamada A, 20, 32, 33, 153,	
Wyss-Coray T, 425	564	Yang J, 176, 602
	Yamada C, 343, 352	Yang JH, 835
X	Yamada M, 23, 31	Yang K, 529
	Yamada S, 40, 448, 449	Yang N, 774
Xia CH, 418	Yamada Y, 406	Yang P, 342, 363, 364
Xia G, 195	Yamagata Y, 483	Yang QL, 671
Xia MQ, 423, 425	**	Yang S, 54, 66
Xiang S, 838-40	Yamagishi H, 106	Yang W, 20, 120, 123, 555,
Xiang XH, 121	Yamagishi K, 140	556
Xiao H, 250, 255, 262, 264	Yamaguchi A, 559	Yang WD, 556
Xiao L, 446, 463	Yamaguchi R, 359	Yang X-P, 36, 150
XIAO S. 165–89	Yamaguchi S, 313	Yang Y, 835
Xiao SH, 166, 175, 180, 181	Yamaguchi TP, 421	Yang Z, 418
Xiao YH, 123	Yamaguchi Y, 447	Yaniv A, 421
Xie D, 284	Yamamoto H, 475, 487	Yaniv M, 249, 761, 775,
Xie W, 579	Yamamoto K, 257, 267,	776
W, 3/7	616	Yanow SK, 354

Yao J, 800, 807, 808 Yao MS, 123 Yao N. 145, 146 Yao Y. 289, 290 Yao ZB, 310, 675 Yarus MY, 903 Yaspo M-L, 32, 155 Yassin A, 908 Yasuda K, 550, 578 Yasuda R, 417 Yasuhara M, 548 Yasui A, 36 Yasukawa T, 427 Yates JL, 337, 341, 349 Yatsula B, 823, 831 Yayon A, 298 Yazawa M, 474 Ye BH, 38 Ye K. 771 Yee D, 253, 776 Yeh BK, 439 Yeh J. 608 Yeh RL, 569 Yelamos J. 37 Yethon JA, 657, 661, 663, 664, 667, 669 Yeung S-M, 724, 725, 728 Yi EC, 639, 644, 645, 653 Yi Q, 796, 800, 807 Yi-Brunozzi HY, 835, 841 Yie J. 266, 267 Yin HL, 773 Ying CY, 346, 361 Yingling J, 420 Yip JW, 416 Yip YP, 416 Yla-Herttuala S, 413 Ylihonko K, 722 Yochem J, 407 Yoder JA, 106 Yokochi T, 682 Yokogawa T, 168 Yokoi M, 20, 32, 33, 153, 358, 360 Yokota T, 684 Yokoyama N, 343 Yokoyama S, 85

Yokoyama T, 531

Yoneda T, 498 Yonekawa T. 154 Yonemoto W, 483 Yoneshima H. 416 Yonezawa N, 757 Yong V, 287 Yoo CJ, 169, 376, 377, 381, 384, 386-88, 390, 391, 394, 396, 834, 836 Yoo EJ, 256 Yoo SJ, 231 York JD, 772 Yoshi M, xxi Yoshida A, 899, 900 Yoshida H. 453 Yoshida K, 64, 336, 337, 339, 341, 353, 437, 448, 454, 455 Yoshida T, 119 Yoshikawa H, 339, 340 Yoshikawa Y, 823 Yoshimoto A, 861 Yoshimura A, 639, 642 Yoshimura J. 731 Yoshinari K, 889, 898, 906 Yoshinobu Y, 314, 316 Yother J. 684, 685 You ZY, 346, 362, 364 Young DW, 639 Young G, 857, 882 Young K, 642 Young L, 539 Young LC, 564 Young MK, 256, 257, 343, 758 Young MN, 672 Young MR, 361, 362 Young NM, 671 Young WG, 652, 653 Yousafzai FK, 228 Yousef IM, 570 Youssoufian H, 447 Yowell CA, 283 Yssel H. 107 Yu FX, 773 Yu H, 28, 199, 573 Yu K, 113, 119 Yu L, 573

Yu RK, 744 Yu S. 33 Yu S-H, 688 Yu S-L, 153, 154 Yu T-P, xxiii Yu W, 124, 381, 383 Yu X, 74, 77, 84, 90 Yu Y, 709 Yuan FH, 32, 34-36, 153-55, 199 Yuan SS, 124 Yuan Y, 177, 180, 182 Yudkovsky N, 264 Yuhanna IS, 428 Yun S. 233 Yurieva O. 343 Yusuke N, 413 Z

Zabinski RF, 855, 861, 882 Zachariah JP, 596 Zachau HG, 106 Zahn R. 444 Zähner H, 740 Zahorchak RJ, 146 Zähringer U, 636, 643, 644, 653, 662 Zaitsev EN, 79 Zaitseva F, 121 Zak NB, 254, 264 Zakian VA, 149 Zako M. 448, 449 Zakowski JJ, 9 Zalisz R. 688 Zaman GJR, 548, 557, 559, 560 Zambrano N, 411, 415 Zambrowicz BP, 253 Zamofing D, 519 Zamudio KR, 175, 177 Zamyatina A, 665, 666 Zan H, 32, 39, 40, 158 Zaritskaya LS, 92, 93 Zarkowsky H, 707-9 Zarkowsky R, 707, 708

Zarzov P, 362, 364

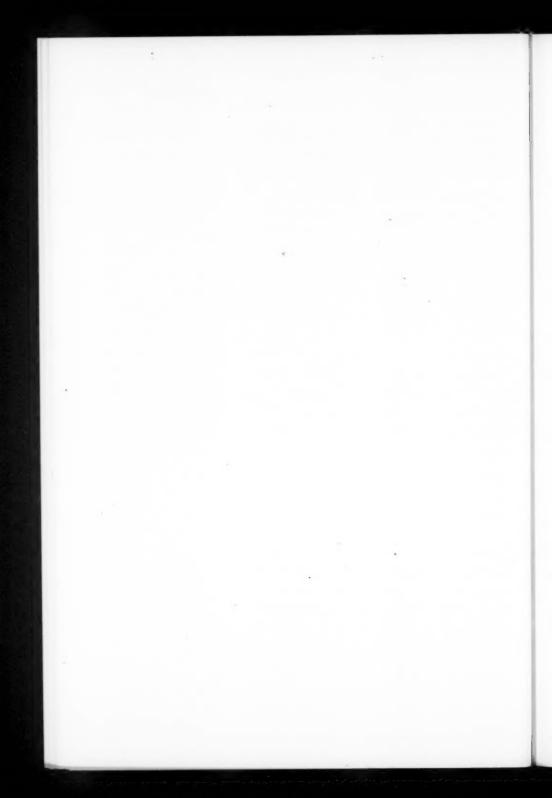
Zatorski A, 619, 621

Zhu Y, 428 Zhu ZY, 486

Zavari M, 252, 267
Zawada RJ, 705
Zdzienicka MZ, 122
Zee MC, 553
Zehelen E, 10
Zehring WA, 309
Zeiss CJ, 549, 560, 561
Zelcer N, 544, 553, 560,
563-65, 568, 650
Zemenides PD, 310
Zemtseva I, 461
Zeng H, 557, 563-65
Zeng XM, 32, 34, 38, 40,
158
Zeng XR, 148
Zeng Y, 818, 820, 839, 840
Zengel JM, 167, 173, 175,
178, 180-82
Zerner B, 861
Zewail AH, 52, 54
Zhabotinsky AM, 496, 503
Zhan Z, 553-55
Zhang AJ, 202
Zhang B, 180
Zhang D, 314
Zhang D-W, 559
Zhang F, 628
Zhang G, 140, 141
Zhang H, 121
Zhang HS, 253, 776
Zhang J, 36
Zhang L, 446, 447, 449,
450, 455, 457, 458,
675, 682
Zhang L-H, 572
Zhang LJ, 455, 457-59, 463
Zhang MC, 252, 258, 259,
758, 766, 768
Zhang P, 148
Zhang QH, 866
Zhang SJ, 148
Zhang T, 292
Zhang X, 376, 381, 396
Zhang XF, 619, 621
Zhang YB, 32, 34-36, 153-
55, 199, 249, 250, 252,

256, 257, 265, 417,
565, 758, 759, 763
Zhang YF, 52, 54
Zhang Z, 292, 824, 831, 833
Zhang Z-J, 550, 560
Zhao J, 415, 757
Zhao K, 252, 758, 759, 761,
769, 772, 773
Zhao KJ, 253, 262, 264,
761, 768
761, 768 Zhao LS, 723–25, 730, 731,
737, 738
Zhao S, 554
Zhao XD, 24, 667
Zhao XL, 499
Zhao Y, 251, 308, 758, 764,
766, 769
Zhao YX, 343, 735
Zhao Z, 717, 719
Zheleznova EE, 549
Zheng BH, 309, 310, 312,
317, 387, 388
Zheng G, 412
Zheng JB, 425
Zheng S, 574
Zhong XJ, 200, 213
Zhong Y, 479
Zhou BB, 335
Zhou D, 448, 456
Zhou DM, 906
Zhou H, 163, 251
Zhou H-Q, 715
Zhou JY, 253
Zhou K, 891, 893, 897, 902,
904, 906, 907, 910
Zhou S, 253, 556, 758, 760,
767, 776
Zhou T, 545, 546
Zhou X, 79
Zhou YD, 309, 420, 803
Zhou Z, 147, 642, 643, 645,
647, 648
Zhu C, 109, 114, 121
Zhu CM, 121
Zhu J, 123, 124, 334
Zhu XD, 38
Lilu AD, 30

Zhuang X, 910 Zhuo M, 423, 425, 427 Zhurkin VB, 79 Ziebell K, 659 Ziehler WA, 169, 170, 175-77, 179, 180, 182 Zihlmann H, 551 Zilm KW, 902, 906, 907 Zimmer C, 276 Zimmer D, 122, 123 Zimmerly S, 175 Zimmermann DR, 436 Zimmermann F, 826 Zimmermann R, 228 Zinoni F, 9, 10, 12 Ziolkowski A, 659, 662, 670 Zito K, 176 Zitzewitz JA, 809 Zlotkin T. 141 Zoccoli G, 319 Zocher R, 705 Zoellner CD, 413 Zolotarjova N, 519, 531 Zomer B, 637, 643, 652 Zornberg GL, 427 Zou L, 345, 358, 359, 362, 364, 365 Zouni A, 242 Zou-Yang XH, 339, 349 Zubkov VA, 732 Zucker I, 312 Zuhlke RD, 485 Zuiderweg ER, 176 Zuliani G. 420 Zullo SJ, 146 Zumft WG, 239, 240 Zuo S, 140, 141 Zuo SJ, 199 Zupicich J, 460, 461 Zwanzig R, 804 Zylka MJ, 309, 310, 312



SUBJECT INDEX

profiency of enzymes as evidence against pure ABCA1 transporter catalysts and, 882 hydrogen-bonding Actin-related proteins model of fidelity, mammalian ABC transporters in health and (ARPs) 200 - 3nuclear actin and actinfuture research, 215-16 disease, 567-74 related proteins in high-fidelity nucleoside abl mutant chromatin remodeling analogs, 212 lipoprotein receptors in and, 75-77 introduction, 192-93 the nervous system and, Actins limitations of steric 415 actin-related proteins in model, 209-10 ACBP protein fast protein folding and, chromatin remodeling methylated nucleobases. and, 75-77 193 809 - 10neuronal Ca2+/ minor groove hydrogen Accessory proteins calmodulin-dependent bonds, 214-15 eukaryotic DNA protein kinase II and, mutations that affect polymerases and, 144 N-2-Acetylaminofluorene 500 - 1fidelity, 200 Activation noninstructional lesions, (AAF) lipopolysaccharide 201 - 2Y-family polymerases endotoxins and, 636-41 nonpolar DNA bases and, 29 neuronal Ca2+/ Acetylation designed de novo. calmodulin-dependent V(D)J recombination and. 195-96 protein kinase II and, nonpolar nucleoside 484-86, 496, 501-3 analogs, 202 Acetylcholinesterase Active site nonpolar shape mimics of profiency of enzymes as catalysts and, 882 eukaryotic DNA .. natural bases, 194-95 polymerases and, 136-N-Acetylglucosamine nonpurine, ponpyrimidine heparan sulfate ligand binding site assembly profiency of enzymes as molecular shapes, and, 451-53 catalysts and, 874-879 202 - 3ACF complex Active site tightness nucleoside analogs, ATP-dependent substrate fit in DNA 193-98, 212 nucleosome remodeling replication and polymerase mutation and, 255 A rule, 201-2 effects, 213 Acid-base catalysis base stacking, 213-14 significant active site concept of active site interactions, 213-15 hepatitis delta virus simple modifications of ribozyme catalysis and, tightness, 210-11 887, 903-9 conclusions, 215-16 natural bases, 193-94 size-altered DNA bases. Acoustic absorption consensus base pair fast protein folding and, shape, 205 195-97 definition of active site. size exclusion in active 789-90 ACP synthase 203 - 4site, 207-8

solvation effects on nucleobase size and shape, 208-9 steric model of DNA replication fidelity. 203-10 sterically-augmented sugars, 197-98 sugar recognition, 214 testable predictions, 211 triphosphate recognition, 214 variations in selectivity without hydrogen bonds, 211-12 varied fidelity of DNA polymerases, 198-200 Watson-Crick hydrogen bonds, 214 wild-type enzymes, 198-99

Active transport Na,K-ATPase and, 511, 520-24

Activity-induced entrainment metabolism and circadian rhythms, 321–27

Adaptive immunity lipopolysaccharide endotoxins and, 636, 639

Adaptive mutations Y-family polymerases and, 17, 30-32

Adaptor proteins lipopolysaccharide endotoxins and, 635, 640-41

ADAR adenosine deaminases RNA editing by ADARs

and, 817-43

ADAT adenosine deaminases RNA editing by ADARs and, 821-22, 838, 840

and, 821–22, 838, ADC1 ribozyme hepatitis delta virus ribozyme catalysis and, 896-97

Adenines

long-distance electron transfer through DNA and, 51, 57-59, 64

Adenocarcinoma cell lines human

vitamin B₁₂ and selenium enzymes, 1, 13

Adenosine deaminases profiency of enzymes as catalysts and, 882

RNA editing by, 817–43 Adenosine triphosphate (ATP)

> DNA replication in eukaryotic cells and, 338, 341-42

> mammalian ABC transporters in health and disease, 537-80

Na,K-ATPase and, 520– 22

neuronal Ca²⁺/
calmodulin-dependent
protein kinase II and,
485-86

nucleosome remodeling and, 247-68 RecA and replication fork

repair, 71, 74–80, 82–92 Y-family polymerases and, 25–27

Aeromonas salmonicida lipopolysaccharide endotoxins and, 683

AGADIR computer algorithm fast protein folding and, 800-1, 806, 808

Aglycones deoxy sugars and, 736-47 A-hopping long-distance electron transfer through DNA and, 57-58

AID enzyme Y-family polymerases and, 40

Aldehydes

glycoprotein synthesis and, 606

"Alien gene" clusters lipopolysaccharide endotoxins and, 653

Alkaline phosphatase profiency of enzymes as catalysts and, 882

Alkylation glycoprotein synthesis and, 606

Alkyl side chains deoxy sugars and, 701–48 "All or nothing" phenomena heparan sulfate ligand

heparan sulfate ligand binding site assembly and, 457

αKAP protein neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 500

Amide hydrogen exchange fast protein folding and, 790

Amino acid decarboxylases profiency of enzymes as catalysts and, 849, 855, 858

Amino groups deoxy sugars and, 701–48 (2S)-Aminolevulinic acid glycoprotein synthesis

glycoprotein synthesis and, 604–5, 621

Aminooxy-sugars glycoprotein synthesis and, 604-6

Aminosugars deoxy sugars and, 728-31 Ammonia vitamin B₁₂ and selenium enzymes, 1, 6-8 Ampicillin

lipopolysaccharide endotoxins and, 639

Amycolatopsis orientalis deoxy sugars and, 743

Amyloid precursor protein (APP) lipoprotein receptors in the nervous system and,

427–28 Anaerobic metabolism vitamin B₁₂ and selenium

enzymes, 1, 6-11 Ancient mobile DNA element

V(D)J recombination and, 101, 116-17

Aneurinibacillus thermoaerophilus lipopolysaccharide endotoxins and, 665–66

antennapedia complex nuclear actin and actinrelated proteins in chromatin remodeling,

Anthraquinone derivatives long-distance electron transfer through DNA and, 66

Antibiotics deoxy sugars and, 701–48 lipopolysaccharide endotoxins and, 635, 638–39, 644, 646–48, 651–53, 678

Anticancer drugs mammalian ABC transporters in health and disease, 552–53

8

Antigen receptor genes V(D)J recombination and, 103

Antigenomic RNA hepatitis delta virus ribozyme catalysis and, 891–92, 896–97, 899, 901–2, 904, 911

Antirrhinum spp.
V(D)J recombination and,
116

Antisense inhibition Y-family polymerases and, 40

Antithrombin

heparan sulfate ligand binding site assembly and, 441-43

ANTP transcription factor long-distance electron transfer through DNA and, 62-63

Y-family polymerases and, 40 Apolipoprotein E (ApoE) lipoprotein receptors in

APOBEC-1 protein

Apolipoprotein E (ApoE) lipoprotein receptors in the nervous system and, 405, 413–17, 424–26

Apomyoglobin fast protein folding and, 807-8

Apoptosis
La protein and, 393
V(D)J recombination and,
122

Y-family polymerases and, 20

Aquifex aeolicus lipopolysaccharide endotoxins and, 644-45, 653-54

Arabidopsis thaliana lipopolysaccharide endotoxins and, 654-55

Archaea eukaryotic Rnase P and, 165

Arginine decarboxylase profiency of enzymes as catalysts and, 858 ARID domain ATP-dependent nucleosome remodeling and, 250

Aromatic polyketide antibiotics

deoxy sugars and, 740-2 Arp proteins

ATP-dependent nucleosome remodeling and, 251–52 nuclear actin and actinrelated proteins in chromatin remodeling, 75–77

arrow mutant lipoprotein receptors in the nervous system and, 407, 421

ARSI gene
DNA replication in
eukaryotic cells and,
355–56

Artemis protein V(D)J recombination and, 101, 121

A rule active site tightness and substrate fit in DNA replication, 201–2

Ascobolus spp. V(D)J recombination and,

Aspartate aminotransferase profiency of enzymes as catalysts and, 849, 882

Association domain neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 473–504

Astrocytes metabolism and circadian rhythms, 319-20

A:T bridges long-distance electron transfer through DNA and, 51-52, 55-56, 59, 66-67 **ATPases** ATP-dependent nucleosome remodeling and, 247-68 eukaryotic Rnase P and, Na, K-ATPase and, 511-31 RecA and replication fork repair, 76, 79-80, 84, 87 - 88ATP-binding cassette (ABC) transporters ABCA1, 571-73 ABCA4, 570-71 ABCB11, 569-70 ABCB4 transporter, 567-ABCD1-4, 574 ABCG2, 555-57 ABCG5, 573-74 ABCG8, 573-74 ABCR, 570-71 BCRP, 555-57 bile formation, 575-77 BSEP, 569-70 conclusions, 579 cyclic nucleotides, 564-66 drug resistance in cancer patients, 562 drug-transporting Pglycoproteins, 547-49 blood-brain barrier. 550-51 clinical anticancer drug resistance, 552-53 drugs/xenotoxins, 549-52 mutations and their effect on drug disposition, 554-55 oral availability of drugs, 551-52 physiological substrates,

553-54

function, 546-47

inhibitors, 561-62

introduction, 538-44

lipid transport, 567 lipopolysaccharide endotoxins and, 648-51, 680 - 84mammalian ABC transporters in health and disease, 567-74 Mdr2/Mdr3 Pglycoprotein, 567 MRPs, 557, 558 MRP1, 558-62 MRP2, 562-63 MRP3, 563-64 MRP4, 564-66 MRP5, 564-66 MRP6, 566-67 nucleotide analogs, 564-66 orphan nuclear receptors, 577-79 regulation of expression, 577-79 structure, 545-46 substrate specificity, 558-ATRX protein ATP-dependent nucleosome remodeling and, 249 Autoinhibition neuronal Ca2+/ calmodulin-dependent protein kinase II and,

483–86 Autonomous activity neuronal Ca^{2,+}/ calmodulin-dependent protein kinase II and, 490–91

Autophosphorylation neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 486–96

486-96 Autoregulation neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 473-504 Azotobacter vinelandii great metalloclusters in enzymology and, 228

B

Bacillus subtilis eukaryotic Rnase P and, 166, 168-70, 176 profiency of enzymes as catalysts and, 869 Y-family polymerases and, 42 Bacitracin lipopolysaccharide endotoxins and, 678 Bacterial lipopolysaccharides deoxy sugars and, 701-48 Bacteroides fragilis RecA and replication fork repair, 81 BAF complex ATP-dependent nucleosome remodeling and, 252-53 nuclear actin and actinrelated proteins in chromatin remodeling, 755, 758-60, 762, 774-

77
BAP complex
nuclear actin and actinrelated proteins in
thromatin remodeling,
761, 774–77
Barker HA, 1, 4, 7
Base excision repair
Y-family polymerases

and, 34, 41 Base-flipping enzymes RNA editing by ADARs and, 840-41

Base stacking active site tightness and substrate fit in DNA replication, 191, 213–14 B cells V(D)J recombination and. 121, 125-26 Y-family polymerases and, 36-37, 39-40

BCL-6 gene Y-family polymerases and, 37

BCRP transporter mammalian ABC transporters in health and disease, 555-57

B domain of protein A fast protein folding and, 805, 809

Benzo(a)pyrene Y-family polymerases and, 29

Bile formation mammalian ABC transporters in health and disease, 575-77

Binding in register RNA editing by ADARs and, 837

bithorax complex nuclear actin and actinrelated proteins in chromatin remodeling. 774

Blood-brain barrier mammalian ABC transporters in health and disease, 550-51

Blood group antigens glycoprotein synthesis and, 595

BMAL1 protein metabolism and circadian rhythms, 308-15, 321-27

Bordetella spp. lipopolysaccharide endotoxins and, 644, 662

Borrelia burgdorferi lipopolysaccharide endotoxins and, 652-53 Brahma gene

nuclear actin and actinrelated proteins in chromatin remodeling. 761, 774-75

Brain

lipoprotein receptors in the nervous system and, 405, 414-24 metabolism and circadian rhythms, 307, 310, 312-16, 318-21, 326 neuronal Ca2+/ calmodulin-dependent protein kinase II and,

Branched-chain sugars deoxy sugars and, 731-34

BRCT domain Y-family polymerases and, 35-36

473-504

breathless mutant heparan sulfate ligand binding site assembly and, 463

BRG1 complex ATP-dependent nucleosome remodeling and, 252-53, 265-67

BRM protein ATP-dependent nucleosome remodeling and, 253-54

Broken ends V(D)J recombination and,

102-27 Bromoacetamido sugars glycoprotein synthesis

and, 606, 608 Brønstead analysis fast protein folding and,

hepatitis delta virus ribozyme catalysis and, 903, 905-6

BSEP transporter mammalian ABC transporters in health and disease, 569-70

"Bubble"

RecA and replication fork repair, 94

Bulges

ATP-dependent nucleosome remodeling and, 260-62 long-distance electron transfer through DNA and, 61 Burkitt's lymphoma

Y-family polymerases and, 38-40 Burst phase

fast protein folding and, 786, 790, 792

hepatitis delta virus ribozyme catalysis and, 898-99, 902 lipoprotein receptors in the nervous system and, 423-24 Na,K-ATPase and, 512-18, 520-21, 523-24, 526-29, 532 nuclear actin and actinrelated proteins in chromatin remodeling. 769-70, 772-73

119 Ca2+/calmodulin-dependent protein kinase II

V(D)J recombination and,

neuronal

αKAP, 500 actin, 500, 501-3 activation, 484-85 activation-dependent translocation, 501-3 ATP binding, 485-86 autoinhibition in basal state, 483-86 autonomous activity, 490-91

Ca2+/CaM binding, 484-86, 489-90 Ca2+ spike frequencies, 492-96 calmodulin-independent activation, 486 CaM trapping, 491-92 coincidence detector. 489-90 computer modeling of frequency-based activation, 496 cytoskeletal targeting, 500 - 3diverse localization. 497-98 diversity of isoforms, 477-79 domain structure, 479-80 function, 477-83 holoenzymes, 479-83 inter-subunit/intraholoenzyme autophosphorylation, intracellular targeting, 497-99 introduction, 474-77 localization, 497-503 membrane targeting. 500 mRNA localization, 498-99 multimerization, 497-98 nuclear targeting, 499-500 postsynaptic density, 500 - 3regulatory autophosphorylation, 486-96 structure, 477-83 summary, 503-4 supramolecular assemblies, 482-83

Thr286 autophosphorylation, 487-90 Caenorhabditis elegans ATP-dependent nucleosome remodeling and, 249 heparan sulfate ligand binding site assembly and, 436, 447-48, 451, 456, 459, 461, 462 La protein and, 379-83 lipoprotein receptors in the nervous system and, 407-9 neuronal Ca2+/ calmodulin-dependent protein kinase II and, 478 - 79RNA editing by ADARs and, 820, 824-25, 830, 835, 839 Calcium spike frequency detection neuronal Ca2+/ calmodulin-dependent protein kinase II and, 473, 492-96 Calmodulin Ca2+/calmodulin-

Ca²⁺/calmodulindependent protein kinase II and, 473–504 Campylobacter jejuni lipopolysaccharide endotoxins and, 663, 666, 672

Cancer

ATP-dependent nucleosome remodeling and, 253 deoxy sugars and 701 eukaryotic DNA polymerases and, 153–54 glycoprotein synthesis and, 600, 608 long-distance electron transfer through DNA

and, 66

mammalian ABC transporters in health and disease, 552–53, 562 V(D)J recombination and, 118 Y-family polymerases and, 17, 20, 31, 33, 38– ·40

CAP5.5 protein proteases in parasitic protozoa and, 290

Carbohydrates active site tightness and substrate fit in DNA replication, 197–98 deoxy sugars and, 701–48 glycoprotein synthesis and, 593–630

deoxy sugars and, 707–16, 720–22

Carbonic anhydrase profiency of enzymes as catalysts and, 847, 858, 882

Carbon monoxide dehydrogenase nickel-carbon great metalloclusters in enzymology and, 221, 235–39

Carboxydothermus hydrogenformans great metalloclusters in enzymology and, 236–37

Carboxypeptidase A profiency of enzymes as catalysts and, 882

Carboxypeptidase B profiency of enzymes as catalysts and, 858

Catabolism proteases in parasitic protozoa and, 275

Catalase profiency of enzymes as catalysts and, 882 Catalysis hepatitis delta virus ribozyme, 887–913 RNA editing by ADARs and, 838–41 Catalytic core

Catalytic core eukaryotic DNA polymerases and, 138– 41

Catalytic domain neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 473–504

Catalytic proficiency enzymatic appendix, 881 conclusions, 880-81

connectivity effects, 874-879 decarboxylation, 859-61, 863-64

effective concentrations of binding determinants at active site, 874–879

enzyme-substrate binding affinity in ground and transition states, 850-54

evaluating catalytic power of an enzyme, 848-49

mechanistic evidence from structure and mutation, 871-74

OMP decarboxylase, 847-58, 861-82

orotidine 5'-phosphate, 863-66

prospects, 880-81 rate enhancements produced by actual enzymes, 854-57

transition state affinity source, 857-59

Caveolae

7

lipoprotein receptors in the nervous system and, 427-28

 Cd^{2+}

hepatitis delta virus ribozyme catalysis and, 900

CD95 gene

Y-family polymerases and, 37

Cdc proteins

DNA replication in eukaryotic cells and, 333, 336, 341–44, 358–66

CDP enzymes

deoxy sugars and, 710-19

Cdt1 protein

DNA replication in eukaryotic cells and, 333, 344

Cell adhesion

heparan sulfate ligand binding site assembly and, 435-64 proteases in parasitic

protozoa and, 275, 290,

291

Cell culture heparan sulfate ligand binding site assembly and, 435-64

Cell cycle

DNA replication in eukaryotic cells and, 333-68

eukaryotic DNA polymerases and, 147–48 proteases in parasitic protozoa and, 275

Cell differentiation proteases in parasitic protozoa and, 275

Cell egress proteases in parasitic protozoa and, 275, 298-99

Cell invasion

proteases in parasitic protozoa and, 275, 277-

Cell rupture

proteases in parasitic protozoa and, 275, 298-

Central circadian oscillator metabolism and circadian rhythms, 307-27

Central nervous system
(CNS)

lipoprotein receptors in the nervous system and, 405, 424-26

RNA editing by ADARs and, 817-43

Chain initiation

heparan sulfate ligand binding site assembly and, 444, 447, 448, 449

Chain polymerization heparan sulfate ligand binding site assembly and, 435, 449-51

Charge transfer long-distance electron transfer through DNA and, 54

Chemoenzymatic synthesis glycoprotein synthesis and, 600-4, 616-18

Chemoselective ligation glycoprotein synthesis and, 593, 605-9, 621-24

Chemotherapy proteases in parasitic protozoa and, 275

Chevron plots fast protein folding and, 790-92

"Chicken foot" structure RecA and replication fork repair, 74, 93-95

Chimeric nucleic acid (CNA) long-distance electron transfer through DNA and, 62

chk1 mutant eukaryotic DNA polymerases and, 144

Chlamydia trachomatis lipopolysaccharide endotoxins and, 642-43

Chloroplast Rnase P eukaryotic Rnase P and, 165, 172

Cholesterol lipoprotein receptors in the nervous system and, 405, 424-26

Cholesterol oxidase vitamin B₁₂ and selenium enzymes, 5

Chorismate mutase profiency of enzymes as catalysts and, 858, 882

CHRAC complex ATP-dependent nucleosome remodeling and, 255

Chromatin

ATP-dependent nucleosome remodeling and, 247-68

DNA replication in eukaryotic cells and, 354-56

nuclear actin and actinrelated proteins in chromatin remodeling, 75-77

V(D)J recombination and, 102-27

Chromosomal translocations V(D)J recombination and, 117–18

Chymotrypsin profiency of enzymes as catalysts and, 882

Circadian rhythms metabolism and activity-induced entrainment, 321-27 brain, 312-15, 318-21 conclusions, 327 core circadian oscillator, 308-11 coupling of independent oscillators, 315-16 dead zone, 325-27 entrainment, 311-27 extra-SCN regions of brain, 314-15 hypothesis, 307-8 liver, 313 multiple independent oscillators, 312-15 periphery, 313-14, 317-

phase response curves, 325–27 suprachiasmatic nucleus, 312–15

cis-acting HDV ribozyme hepatitis delta virus ribozyme catalysis and, 899

cis displacement nuclear actin and actinrelated proteins in chromatin remodeling, 767

Citrobacter spp. deoxy sugars and, 723

Clamps/clamp loaders spp.eukaryotic DNA polymerases and, 133, 145–46

CLOCK:BMAL1 heterodimer metabolism and circadian rhythms, 308–15, 321–

27

Clostridium spp. deoxy sugars and, 725 great metalloclusters in enzymology and, 228 history of research, 5 vitamin B₁₂ and selenium enzymes, 1, 4, 6, 8-10

Clusters great metalloclusters in enzymology and, 221-43

C-O bond cleavage deoxy sugars and, 707–16, ·720–22

CobU protein RecA and replication fork repair, 83

Cockayne syndrome ATP-dependent nucleosome remodeling and, 249-50

Coding joints V(D)J recombination and, 106-7, 121-22

Coiled coils fast protein folding and, 809

Coincidence detector neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 489-90

Collagen heparan sulfate ligand binding site assembly and, 442

Collapsed replication forks RecA and replication fork repair, 71-96

Combinatorial biosynthesis deoxy sugars and, 701-48

Conformational landscape fast protein folding and, 811

Connectivity effects profiency of enzymes as catalysts and, 874-879

Consensus base pair shape active site tightness and substrate fit in DNA replication, 205-7

Consensus sequences deoxy sugars and, 744-47 Constitutive lipid A (endotoxin) pathway lipopolysaccharide endotoxins and, 641-43, 651

Coordinated interplay eukaryotic DNA polymerases and, 147-49

Coordinated RNA pathways eukaryotic Rnase P and, 182-84

Copper sulfide-based cluster great metalloclusters in enzymology and, 221, 239-40

Core circadian oscillator metabolism and circadian rhythms, 307-27

Core oligosaccharides lipopolysaccharide endotoxins and, 655-72

Coupled cleavage V(D)J recombination and, 112-13

Covalent modification lipopolysaccharide endotoxins and, 643–46

Cowcatcher model for translesion synthesis Y-family polymerases and, 25, 28

Crithidia fasciculata proteases in parasitic protozoa and, 295

Crossovers long-distance electron transfer through DNA and, 61

Cruzain proteases in parasitic protozoa and, 286-89

Cry genes metabolism and circadian rhythms, 309-11, 313-14, 323-26

Cryptococcus neoformans

heparan sulfate ligand binding site assembly and, 456

Cryptosporidium parvum proteases in parasitic protozoa and, 281

CSF1 gene ATP-dependent nucleosome remodeling and, 262, 264

C-terminal domains RecA and replication fork repair, 74, 76, 80, 82, 84-85, 88, 90

Cyanidium caldarium lipopolysaccharide endotoxins and, 655

Cyanophora paradoxa eukaryotic Rnase P and, 172

Cyclic nucleotides mammalian ABC transporters in health and disease, 564-66

Cyclin-dependent kinases (CDK)

DNA replication in eukaryotic cells and, 333, 350-53, 361-65

cysE mutant

lipopolysaccharide endotoxins and, 663

Cysteine proteases proteases in parasitic protozoa and, 293-95

Cytidine deaminase profiency of enzymes as catalysts and, 849, 858– 59, 882

Cytoadherence proteases in parasitic protozoa and, 275, 290– 91

Cytochrome c peroxidase profiency of enzymes as catalysts and, 849, 882 Cytoplasmic adaptor proteins lipoprotein receptors in the nervous system and, 414, 415, 417, 418, 419

Cytosine side chain hepatitis delta virus ribozyme catalysis and, 887, 891–92, 894–95, 900–2, 904–7, 912–13

Cytoskeletal targeting neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 500-3

D

dally mutants heparan sulfate ligand binding site assembly and, 460

Dbf4p-dependent kinase (DDK) DNA replication in eukaryotic cells and, 333, 361-62, 364-66

Dbp11 protein DNA replication in eukaryotic cells and, 359-61

dCMP transferase Y-family polymerases and, 30

N-Deacetylaytion heparan sulfate ligand binding site assembly and, 451-53

"Dead time" fast protein folding and, 786

Dead zone metabolism and circadian rhythms, 325-27

Deaminases RNA editing by ADARs and, 817-43

Decarboxylation profiency of enzymes as catalysts and, 859-61, 863-64 Deep-rough-phenotype lipopolysaccharide endotoxins and, 661-62 Deinococcus radiodurans lipopolysaccharide endotoxins and, 652-53 Denatured state structure fast protein folding and, 790-92, 804-7 Deoxy sugars aglycones, 736-47 aminosugar biosynthesis, 728 - 31aromatic polyketide antibiotics, 740-42 biosynthetic applications, 734 - 47branched-chain sugar biosynthesis, 731-34 C-2 deoxygenation, 720-22 C-2 or C-4 oxidation. 717-19 C-4 deoxygenation, 725, 728 C-N bond formation in desoxamine biosynthesis, 730 - 31C-O bond cleavage at C-2, 720-22 C-O bond cleavage at C-3, 711-16 C-O bond cleavage at C-6, 707-11 CDP-6-deoxy-6,6difluoro-α-D-glucose, 710 CDP-6-deoxy-L-threo-Dglycero-4-hexulose 3dehydrase, 711-16 CDP-6-deoxy-L-threo-Dglycero-4-hexulose 3dehydrase reductase, 711-16 CDP-D-paratose synthase, 716 - 17CDP-tyvelose 2-

epimerase, 717-19

consensus sequences, 744-47 crystal structure, 735-36 Des I, 724-28 Des II, 724-28 desoxamine, 730-31 DesV, 730-31 4,6-dideosugar biosynthesis, 723-28 2,6-dideoxyhexose biosynthesis, 719-22 3,6-dideoxyhexose biosynthesis, 706-19 E1, 711-16 E3, 711-16 EOD, 707, 708, 709, 710, epimerization at C-2, 717-19 FAD, 714 [2Fe-S] clusters, 714 α-D-glucopyranosyl-1phosphate thymidylyltransferase, 735-36 glycopeptide antibiotics, 742 - 44glycosyltransferases, 736-47 hexose-1-phosphate nucleotidyltransferases, 735 introduction, 702-6 localization of unpaired electron spin, 715-16 macrolide antibiotics, 737 - 40mycaminose, 728-29, 731 NDP-sugars, 735-47 one-carbon branched chain attachment, 733-34 pyridoxamine 5'phosphate, 712-14 radical intermediates, 715-16 redox properties, 714-15 reduction at C-4, 716-17

stereochemical studies, 709 - 10substrate specificity, 735 summary, 747-48 transamination, 728-29. 731 two-carbon branched .chain attachment, 731-33 TylB, 728-29, 731 TylC1, 720-22 TylC1 homologs, 722 TylC3, 733-34 TylX3, 720-22 TylX3 homologs, 722 YerE, 731-33 Deoxygenation deoxy sugars and, 720-22, 725, 728 Des I/Des II enzymes deoxy sugars and, 724-28 Desosamine deoxy sugars and, 730-31 Desulfovibrio spp. great metalloclusters in enzymology and, 233, 238 .DesV enzyme deoxy sugars and, 730-31 Development brain lipoprotein receptors in the nervous system and, 414-24 embryonic nuclear actin and actinrelated proteins in chromatin remodeling. 774-75 dHS6st gene heparan sulfate ligand binding site assembly and, 463 Dideoxysugars deoxy sugars and, 706-22 Diffusion-collision mechanism

fast protein folding and,

783, 804-7

Digitalis
Na,K-ATPase and, 525–26
Dimerization
ATP-dependent
nucleosome remodeling
and, 259–60

RNA editing by ADARs and, 840

Dimethylsulfate (DMS) hepatitis delta virus ribozyme catalysis and, 908

DINB1 gene eukaryotic DNA polymerases and, 154

Dinucleosome ATP-dependent nucleosome remodeling and, 259

Diptericin glycoprotein synthesis and, 609-10

disabled mutant lipoprotein receptors in the nervous system and, 415

Disaccharide subunits heparan sulfate ligand binding site assembly and, 438

Dithiotreitol (DTT) Na,K-ATPase and, 519

Divalent metal ions hepatitis delta virus ribozyme catalysis and, 898–902, 907, 912

Diverse localization neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 497–98

Diversity heparan sulfate ligand binding site assembly and, 437–39

lipopolysaccharide endotoxins and, 651-55 neuronal Ca²⁺/
calmodulin-dependent
protein kinase II and,
477-79

D-loops RecA and replication fork repair, 75, 92

Dmc1 protein RecA and replication fork repair, 74, 76

DNA43/MCM10 gene DNA replication in eukaryotic cells and, 357–58

DNA binding DNA replication in eukaryotic cells and, 337–41

long-distance electron transfer through DNA and, 62-63

RecA and replication fork repair, 76–77, 84 V(D)J recombination and, 118–19

DNA breakage V(D)J recombination and, 102–27

DNA cleavage V(D)J recombination and, 111–12

DNA damage RecA and replication fork repair, 71–96

, DNA-dependent protein kinase (DNA-PK) V(D)J recombination and, 101, 118, 121-22

DNA helicases DNA replication in eukaryotic cells and, 345–46

DNA ligase IV V(D)J recombination and, 101, 121–23

DNA pairing RecA and replication fork repair, 78–79 DNA/PNA duplexes long-distance electron transfer through DNA and, 62

DNA polymerases active site tightness and substrate fit in DNA replication, 191–216 DNA replication in eukaryotic cells and, 359–61

error-prone in prokaryotes and eukaryotes, 17-43

eukaryotic accessory proteins, 144 catalytic core, 138–141 cell-cycle regulation, 147–48

147–48 classical DNA polymerases, 136–51 coordinated interplay, 147–49 DNA polymerase α,

138, 141–42 DNA polymerase α/ primase, 147–49

DNA polymerase β , 150–151

DNA polymerase ε, 139, 141, 143, 147–49 DNA polymerase η, 151–54

DNA polymerase γ, 139, 143, 146–49

DNA polymerase ι, 151–55 DNA polymerase κ,

151–54 DNA polymerase λ, 156

DNA polymerase μ, 156–57

DNA polymerase ϕ , 157 DNA polymerase σ , 157

DNA polymerase θ , 156 DNA polymerase ξ. 151-53, 155 DNA recombination, 149 DNA repair, 148-49 domains, 138-41 evolution, 136-40 fidelity of DNA synthesis, 144 future research, 158 immune system, 157-58 introduction, 134-35 lesion-replicating enzymes, 151-56 matchmaker concept for eastablishing a moving platform, 144 novel DNA polymerases, 151-58 PCNA, 145-46 prototype of a repair enzyme, 150-51 replication factor C, 144-45 Rev1, 151-53, 155 structural and functional conservation within catalytic core, 138-139 telomere maintenance. 149 terminal deoxynucleotidyl transferase, 157 very-concerved active site, 136-40 DNA recombination eukaryotic DNA polymerases and, 133-58 DNA repair eukaryotic DNA polymerases and, 133, 148 - 49V(D)J recombination and. 102-27 DNA repair factories

Y-family polymerases and, 17, 41-43 DNA replication active site tightness and substrate fit in DNA replication, 191-216 in eukaryotic cells activation, 364 assembly, 349-50 ATP, 338, 341-42 Cdc6 protein, 341-44 Cdc7p/Dbf4p, 361-66 Cdc45 protein, 358-61 Cdt1 protein, 344 chromatin, 354-56 conclusion, 366-68 control of replication timing, 365-66 cyclin-dependent kinases, 350-53, 361-65 Dbp11 protein, 359-61 DDK, 361-66 DNA binding, 337-41 DNA helicase at replication fork, 345-46 DNA polymerases, 359 - 61function, 349-50 geminin, 353 intra-S-phase checkpoint, 366 introduction, 334-35 localization, 342-43, 348 - 49Mcm2-7 protein complex, 344-49 Mcm10/Dna43 protein, 357-58 nuclear localization. 348 - 49nucleotide regulation. 347 - 48origin recognition complex, 335-41, 352-53

pre-replicative complex, 335-56 proteolysis, 342-43 regulation, 350-56 re-replication, 350-54 Sld proteins, 358-61 subunit association, 339 targeting, 362-64 transition to replication, 356-59, 361-65 eukaryotic DNA polymerases and, 133-58 DNA/RNA duplexes long-distance electron transfer through DNA and, 51, 62 DNase I digestion analysis nuclear actin and actinrelated proteins in chromatin remodeling, 756, 767 DNA strand exchange reactions RecA and replication fork repair, 78 DNA topoisomerases RecA and replication fork repair, 94-95 Doped polymers long-distance electron transfer through DNA and, 68 Double-strand breaks RecA and replication fork repair, 71, 73-75, 91-92 V(D)J recombination and, 102-27 Y-family polymerases and, 39 Double-stranded RNA (dsRNA) RNA editing by ADARs and, 817-43 Downstream signaling lipopolysaccharide

endotoxins and, 635

Drosocin

glycoprotein synthesis and, 605, 609 Drosophila melanogaster ATP-dependent nucleosome remodeling and, 249, 252-54, 264-DNA replication in eukaryotic cells and, 334-37, 339-40, 344, 355 eukaryotic DNA polymerases and, 146 glycoprotein synthesis and, 594 heparan sulfate ligand binding site assembly and, 436, 447, 449, 451, 456, 459-63 La protein and, 379-83, 394 lipoprotein receptors in the nervous system and, 407-9, 413-15, 421 metabolism and circadian rhythms, 309, 324 neuronal Ca2+/ calmodulin-dependent protein kinase II and, 478 - 79nuclear actin and actinrelated proteins in chromatin remodeling, 758-61, 764, 774-77

Y-family polymerases and, 32, 34 Drug resistance mammalian ABC transporters in health and disease, 562 Drug transport

RNA editing by ADARs

29, 835, 839

116, 119

and, 820, 823, 825, 828-

V(D)J recombination and,

mammalian ABC transporters in health and disease, 547-55

Duplex DNA/peptide complexes long-distance electron transfer through DNA and, 51, 62

E EDTA

hepatitis delta virus ribozyme catalysis and, 896, 901

EKLF protein ATP-dependent nucleosome remodeling and, 264

Electric conduction long-distance electron transfer through DNA and, 68

Electron injection long-distance electron transfer through DNA and, 66-67 Electron transfer

long-distance through DNA, 51-68 Electrostatic ground-state

destabilization hepatitis delta virus ribozyme catalysis and, 911

Embryonic development nuclear actin and actinrelated proteins in chromatin remodeling, 774–75

Emmprin glycoprotein synthesis and, 625 enabled mutant

lipoprotein receptors in the nervous system and, 415 Encystation proteases in parasitic protozoa and, 275

End invasion RecA and replication fork repair, 71, 92, 96

Endonucleases eukaryotic Rnase P and, 165-84

La protein and, 385 Endopeptidases

proteases in parasitic protozoa and, 279-80

Endotoxins lipopolysaccharide, 635–90

Energy landscape . fast protein folding and, 811

Energy transduction Na,K-ATPase and, 522–24 Engrailed homeodomain fast protein folding and, 807

Enhancers V(D)J recombination and, 101 &

Entamoeba histolytica proteases in parasitic protozoa and, 278, 290– 92

Enterobacter spp.
lipopolysaccharide
endotoxins and, 652
Enterococcus faecium
deoxy sugars and, 742
Entrainment
metabolism and circadian
rhythms, 307–27
Entropic penalty

hepatitis delta virus ribozyme catalysis and, 911 Enzymology

great metalloclusters and, 221–43 proteases in parasitic protozoa and, 275–99

Epimerases

heparan sulfate ligand binding site assembly and, 435, 453-54 Epimerization deoxy sugars and, 717-19 Equilibrium methods fast protein folding and, 787-88 Error-free replication restart Y-family polymerases and, 28-29 Error-prone repair DNA polymerases in prokaryotes and eukaryotes, 17-43 Erythropoietin glycoprotein synthesis and, 623-24 Escherichia coli deoxy sugars and, 707-11, 731, 748 DNA replication in eukaryotic cells and, 343, 367 eukaryotic DNA polymerases and, 136, 141, 145-46, 151 eukaryotic Rnase P and, 176 - 77glycoprotein synthesis and, 611, 623 heparan sulfate ligand binding site assembly and, 452 hepatitis delta virus ribozyme catalysis and, 908 lipopolysaccharide endotoxins and, 636-89 mammalian ABC transporters in health and disease, 545 Na, K-ATPase and, 522 proficency of enzymes as catalysts and, 869

proteases in parasitic

protozoa and, 280, 294

RecA and replication fork repair, 71-96 RNA editing by ADARs and, 839-40 V(D)J recombination and. vitamin B₁₂ and selenium enzymes, 9, 11-12 Y-family polymerases and, 18-35, 41, 43 Eukaryotes DNA replication in eukaryotic cells and, 333 - 68error-prone repair DNA polymerases and, 17, 32, La protein and, 375-99 Rnase P and, 165-84 Y-family polymerases and, 41-43 Euplotes aediculatus La protein and, 380-83. 389-90 Evolution eukaryotic DNA polymerases and, 136great metalloclusters in enzymology and, 221, 227 lipoprotein receptors in the nervous system and, 405 - 10metabolism and circadian rhythms, 307-8 RNA editing by ADARs and, 842 V(D)J recombination and, 101, 116-17 Excess electron transfer long-distance electron transfer through DNA and, 54, 65-67 Excystation

proteases in parasitic

82

protozoa and, 275, 281-

Exonucleases eukaryotic DNA polymerases and, 137 La protein and, 375, 385-Exponential kinetics fast protein folding and, 792 Export lipopolysaccharide endotoxins and, 648-51, 688 - 89EXT1-gene heparan sulfate ligand binding site assembly and, 462 Extracellular domain lipopolysaccharide endotoxins and, 635 eyelid gene nuclear actin and actinrelated proteins in chromatin remodeling, 774-75 Facilitated DNA rotation model RecA and replication fork repair, 88-91 Facilysin proteases in parasitic protozoa and, 285-86 deoxy sugars and, 714 Falcipain proteases in parasitic protozoa and, 284-85 Fast protein folding analytical models, 790-96 φ-value analysis, 794-

exponential kinetics.

790-92

792-94

multistate folding tests,

solvent accessibility,

618, 620

(FRET)

897-98, 903

Fluorescence in situ

and, 35

Fork regression

repair, 92-96

Formate dehydrogenase

enzymes, 9-11

neuronal Ca2+/

496

Frequency-based activation

calmodulin-dependent

protein kinase II and,

Fluorescence energy

glycoprotein synthesis

resonance transfer

ribozyme catalysis and,

hybridization (FISH)

RecA and replication fork

vitamin B₁₂ and selenium

Y-family polymerases

hepatitis delta virus

and, 597, 605, 609, 611,

structural/topological determinants, 796-97 transition state model, 792-96 2-state folding tests, 790-92 Brønsted plots, 796 conclusions, 810-11 equilibrium methods, 787-88 acoustic absorption, 789-90 amide hydrogen exchange, 790 magnetic resonance, 788-89 future directions, 810-11 individual side chains, 794-96 introduction, 784-85 methods for measuring kinetics, 785-90 molecular mechanisms. 797-98, 806-10 ACBP, 809-10 apomyoglobin, 807-8 B domain of protein A, 805, 809 denatured state structure, 799-800, 804-7 determinants of fastfolding mechanisms, 796-800 diffusion-collision mechanism, 804-7 engrailed homeodomain, 807 GCN4 coiled coil, 809 heterogeneous mechanisms, 803-4 homogeneous mechanisms, 800-3 intermediates, 798-99 monomeric \(\lambda\) repressor. 808 non-native structure, 798

nucleation/condensation mechanism, 801-3 protein L/protein G, 807 sequence, 797-98 parallel pathways test, 796 perspective, 784-85 scope of review, 784-85 transient methods rapid perturbations of state variables, 787 sample mixing, 785-86 Fatty acids vitamin B₁₂ and selenium enzymes, 1, 5-8 [Fe-S] clusters [deoxy sugars and, 714 great metalloclusters in enzymology and, 221, 225-27 FGF-2 protein heparan sulfate ligand binding site assembly and, 439-41, 463 Fibrillin heparan sulfate ligand binding site assembly and, 442 Fibronectin heparan sulfate ligand

binding site assembly

active site tightness and

substrate fit in DNA

replication, 191-216

long-distance electron

endotoxins and, 676-78

(Fmoc)-based chemistry

transfer through DNA

photoactivated

and, 66-67

lipopolysaccharide

Fluorenylmethylcarbonyl

and, 442

Fidelity

Flavins

Flippase

fringe-connection mutant heparan sulfate ligand binding site assembly and, 461 **Fumarase** profiency of enzymes as catalysts and, 858, 882 G GAG biosynthetic enzymes heparan sulfate ligand binding site assembly and, 461-63 Gagosome heparan sulfate ligand binding site assembly and, 457 GAL1 promoter ATP-dependent nucleosome remodeling and, 251, 267 Galactose oxidase glycoprotein synthesis

and, 606

Gallus gallus eukaryotic DNA polymerases and, 147

Gap repair

RecA and replication fork repair, 73

Gastrointestinal tract mammalian ABC transporters in health and disease, 537-80

GCN4 coiled coil fast protein folding and, 809

GCN5 complex ATP-dependent nucleosome remodeling and, 267

Gear-shaped core neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 473–504

Geminin

DNA replication in eukaryotic cells and, 353

Gene clusters deoxy sugars and, 701

Gene regulation ATP-dependent nucleosome remodeling and, 247–68

Genomic RNA hepatitis delta virus ribozyme catalysis and, 887, 891–92, 899, 901–2, 904

Genomics

ATP-dependent nucleosome remodeling and, 247–68 DNA replication in eukaryotic cells and, 333–68 eukaryotic DNA polymerases and, 133–58 lipopolysaccharide endotoxins and, 635, 651 RNA editing by ADARs and, 817-43

Geometric ground-state destabilization model hepatitis delta virus ribozyme catalysis and, 910-11, 913

G-hopping long-distance electron transfer through DNA and, 55-57

Giardia spp. proteases in parasitic protozoa and, 282

α-D-Glucopyranosyl-1phosphate thymidylyltransferase deoxy sugars and, 735–36

Glutamate

metabolism and circadian rhythms, 319-20 receptor RNAs

RNA editing by ADARs and, 826–27 Glutathione peroxidase

vitamin B₁₂ and selenium enzymes, 8–10

Glycal assembly method glycoprotein synthesis and, 619

GlyCAM-1 glycoprotein synthesis and, 604-5

Glycine reductase vitamin B₁₂ and selenium enzymes, 10

Glycopeptide antibiotics deoxy sugars and, 742-44

Glycosaminoglycans heparan sulfate ligand binding site assembly and, 435–64

Glycosidases profiency of enzymes as catalysts and, 855

Glycosylation glycoprotein/glycopeptide synthesis and chemical synthesis of N-linked glycopeptides and proteins, 618-21 chemical synthesis of O-linked glycopeptides, 597-600

chemoenzymatic synthesis of N-linked glycopeptides, 616–18 chemoenzymatic synthesis of O-linked glycopeptides, 600–4

chemoselective ligations for synthesis of Nlinked glycopeptides and proteins, 621–24

chemoselective ligations for synthesis of Olinked glycopeptides, 605-9

glycosylphosphatidylinositol-anchored proteins, 625–30 introduction, 594–95 mucin-type O-linked

mucin-type O-linked glycosylation, 595– 611

native chemical ligation in synthesis of Olinked glycoproteins, 609-11, 625

N-linked glycosylation, 611–25

recombinant methods for production of Nlinked glycoproteins, 615

summary, 630

heparan sulfate ligand binding site assembly and, 435-64

Na,K-ATPase and, 511-31 Glycosylphosphatidylinositol (GPI)-anchored proteins glycoprotein synthesis and, 593, 625-30 Glycosyltransferases deoxy sugars and, 701, 736–47 heparan sulfate ligand binding site assembly and, 435–64

Glyoxalase profiency of enzymes as catalysts and, 849

Glypicans heparan sulfate ligand binding site assembly and, 460-61

gmh mutants lipopolysaccharide endotoxins and, 663, 665-66

G-oxidation products long-distance electron transfer through DNA and, 51-52

GPC3 gene heparan sulfate ligand binding site assembly and, 461

GPI anchor glycoprotein synthesis and, 593, 625-30

G proteins nuclear actin and actinrelated proteins in chromatin remodeling, 769-71

Gram-negative bacteria lipopolysaccharide endotoxins and, 635–90

Great metalloclusters in enzymology conclusions, 240–43 future research, 241–43 introduction, 222–27 iron-only hydrogenase, 233–35 iron-sulfur proteins, 225–27

metalloclustercontaining enzymes, 227–40 nickel-containing carbon monoxide dehydrogenase, 235– 39 nitrogenase, 227–33 redox active metalloproteins, 222–

Green fluorescent protein (GFP)

glycoprotein synthesis and, 629-30

Ground state profiency of enzymes as catalysts and, 850-54

Growth control heparan sulfate ligand binding site assembly and, 435-64

GTPases nuclear actin and actinrelated proteins in

related proteins in chromatin remodeling, 769-71 gtr genes

lipopolysaccharide endotoxins and, 687 Guanines

hepatitis delta virus ribozyme catalysis and, 908

long-distance electron transfer through DNA and, 51-61, 62, 64-65

H

H2AX histone V(D)J recombination and, 101, 121, 123–24

Haemophilus influenzae lipopolysaccharide endotoxins and, 642, 663, 665–67, 672

Hairpins hepatitis delta virus ribozyme catalysis and, 895, 901, 908 RNA editing by ADARs and, 833–34, 836–37 V(D)J recombination and, 102–27 Haloarcula marismortui hepatitis delta virus ribozyme catalysis and,

Halobacteria eukaryotic Rnase P and, 166

908

Hammerhead ribozymes hepatitis đelta virus ribozyme catalysis and, 902–3, 908–9, 913

HAT complex ATP-dependent nucleosome remodeling and, 252, 266-67

hBRM complex ATP-dependent nucleosome remodeling and, 252-53, 265-67

HDINBI gene Y-family polymerases and, 34

HEB protein V(D)J recombination and, 126

Helicases
DNA replication in
eukaryotic cells and,
345-46

RecA and replication fork repair, 91

α-Helices RecA and replication fork repair, 81, 83

Helicobacter pylori lipopolysaccharide endotoxins and, 666

Helix docking hepatitis delta virus ribozyme catalysis and, 910

Hemostasis

heparan sulfate ligand binding site assembly and, 435 Heparan sulfate ligand binding site assembly antithrombin, 441-43 biologically-active oligosaccharides, 439-44 chain initiation, 444, 447chain polymerization, 449 - 51conclusions, 463-64 disaccharide subunits, 438 diversity, 437-39 enzymes and corresponding human genes, 445-47 epimerization, 453-54 FGF-2, 439-41 formation of heparan sulfate, 444-56 GAG biosynthetic anzymes, 461-63 GlcNAc N-deacetylation/ N-sulfation, 451-53 glypicans, 460-61 herpes simplex virus glycoproteins, 443-44 human disorders, 459-63 introduction, 436 model organisms, 459-63 overview, 457-59 patterning, 459-63 polymer modification reactions, 451-53 proteoglycans, 459 3-O-sulfation, 454-56 6-O-sulfation, 454-56 topology, 456, 457 uronic acid 2-O-sulfation, 453-54 Hepatitis delta virus (HDV) catalytic strategies and active site structure of genomic ribozyme,

893-96

cleavage ion the absence of divalent metal ions, 901-2 divalent metal ions. 902 - 3electrostatic groundstate destabilization, 911 general acid-base catalysis by DNA nucleobases, 908-9 general acid-base catalysis by RNA nucleobase, 903-9 geometric ground-state destabilization model, hydrated divalent metal ions as acid or base catalysts, 900-1 intrinsic binding energy. 909 - 12introduction, 888 kinetic mechanism. 896-98 perspective, 912-13 phosphate oxygens, 899-900 phosphodiester bond cleavage, 888-90 primary structure, 891-92 reducing entropic penalty of forming transition state, 911 replication function, 890-91 RNA side chains in acid-base catalysis, 904 - 8secondary structure, 891-92 summary, 912-13 trans-acting HDV ribozyme, 896-98

catalytic metal ions, RNA editing by ADARs 899-900 and, 831-33 Herpes simplex virus glycoproteins heparan sulfate ligand binding site assembly and, 443-44 Heterocyclic compounds long-distance electron transfer through DNA and, 63 Heterodimerization metabolism and circadian rhythms, 308-15, 321-27 Na, K-ATPase and, 511-31 Heterogeneous mechanisms fast protein folding and, 803 - 4Hexose-1-phosphate nucleotidyltransferases deoxy sugars and, 735 Hg2+ hepatitis delta virus ribozyme catalysis and, 900 Hha 1 long-distance electron transfer through DNA and, 62-63 High-fidelity nucleoside analogs active site tightness and substrate fit in DNA replication, 212 Hill constant hepatitis delta virus ribozyme catalysis and, 899, 902 HIR genes ATP-dependent nucleosome remodeling and, 251 HIS3 gene ATP-dependent

nucleosome remodeling

and, 251, 267

Histones

ATP-dependent nucleosome remodeling and, 247–68 V(D)J recombination and, 101, 121, 123–25

HIV protease profiency of enzymes as catalysts and, 849, 882

HMG proteins V(D)J recombination and, 111-12, 119

Hole transfer long-distance electron transfer through DNA and, 54-65

Hole transport long-distance electron transfer through DNA and, 53-65

Holliday structures RecA and replication fork repair, 74, 93-95

Holoenzymes eukaryotic DNA polymerases and, 133–58 eukaryotic Rnase P and, 165–84

Homeostasis neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 473–504

Homo sapiens

DNA replication in eukaryotic cells and, 339 La protein and, 379–82 RNA editing by ADARs and, 820, 824, 830

Homogeneous mechanisms fast protein folding and, 800-3

HO promoter
ATP-dependent
nucleosome remodeling
and, 266-67
Host cell invasion

proteases in parasitic protozoa and, 275, 277-81

Host cell rupture proteases in parasitic protozoa and, 275, 298-99

Hs genes heparan sulfate ligand binding site assembly and, 463

htrB mutant lipopolysaccharide endotoxins and, 643, 648 hus1 mutant

eukaryotic DNA polymerases and, 144 Hydrazine

glycoprotein synthesis and, 597

Hydrogen bonds active site tightness and substrate fit in DNA replication, 191–216 deoxy sugars and, 701–48 hepatitis delta virus ribozyme catalysis and, 894–95, 904–7

Hydrogenases great metalloclusters in enzymology and, 221, 233–35 vitamin B₁₂ and selenium enzymes, 10–11

Hydrophobic cluster analysis lipopolysaccharide endotoxins and, 668

Hydrophobic effects active site tightness and substrate fit in DNA replication, 191–216 5'-Hydroxyl displacement

mechanism hepatitis delta virus ribozyme catalysis and, 888-90, 894, 898, 904, 906

Hydroxyl groups

deoxy sugars and, 701-48

I

lce
electron injection by γradiolysis in
long-distance electron
transfer through DNA
and, 66

Imidazole hepatitis delta virus ribozyme catalysis and, 905

Immune response eukaryotic DNA polymerases and, 157–58 lipopolysaccharide endotoxins and, 635–41 proteases in parasitic protozoa and, 275

Immunoglobulin genes V(D)J recombination and, 102–27 Y-family polymerases

and, 17, 31, 36–39 Indirect helicase

RecA and replication fork repair, 91 Individual side chains

fast protein folding and, 794–96

Infectious disease deoxy sugars and, 701–48 lipopolysaccharide endotoxins and, 635

Inflammatory response glycoprotein synthesis and, 608 lipopolysaccharide endotoxins and, 635–36

Innate immunity lipopolysaccharide endotoxins and, 636-41

Ino80 complex nuclear actin and actinrelated proteins in chromatin remodeling, 761, 763 Inosine

RNA editing by ADARs and, 817-43

Inositol phosphates nuclear actin and actinrelated proteins in chromatin remodeling, 769-72

Insulin

glycoprotein synthesis and, 627

Integrins

lipoprotein receptors in the nervous system and, 417

Internal loops

RNA editing by ADARs and, 836-37

Intracellular targeting neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 497–99

Intra-S-phase checkpoint DNA replication in eukaryotic cells and, 366

Intrinsic binding energy hepatitis delta virus ribozyme catalysis and, 909-13

Iron-only hydrogenase great metalloclusters in enzymology and, 233-35

ISWI complexes ATP-dependent nucleosome remodeling and, 249-50, 254-56, 262, 264

J

J1/2 crossover hepatitis delta virus ribozyme catalysis and, 897

jekkyl mutant

heparan sulfate ligand binding site assembly and, 461 Jigsaw puzzle model fast protein folding and, 800

JUMPStart sequence lipopolysaccharide endotoxins and, 663, 674

long-distance electron transfer through DNA and, 61

.

Na,K-ATPase and, 511–31 K72R mutant RecA and replication fork

repair, 86, 88 kdt mutants

lipopolysaccharide endotoxins and, 642, 663, 665

Ketones

glycoprotein synthesis and, 604-5

Ketosteroid isomerase profiency of enzymes as catalysts and, 858

Kinases

neuronal Ca²⁺/
calmodulin-dependent
protein kinase II and,
473–504

Kinetics

fast protein folding and, 783–811 hepatitis delta virus ribozyme catalysis and, 896–98

Klebsiella spp. great metalloclusters in enzymology and, 228 lipopolysaccharide endotoxins and, 652, 658-59, 662-63, 670, 680-84, 688

Knockouts RNA editing by ADARs and, 825–26 Kochetkov method glycoprotein synthesis and, 619, 621

Ku protein

V(D)J recombination and, 101, 121-22

L

β-Lactamase profiency of enzymes as catalysts and, 882

Lactococcus lactis mammalian ABC

transporters in health and disease, 545

lacZ gene

Y-family polymerases and, 31, 39

Lagging strand gap RecA and replication fork repair, 93–94 Y-family polymerases

Y-family polymerases and, 22, 41

A repressor monomeric

fast protein folding and, 808

Laminin

heparan sulfate ligand binding site assembly and, 442

La protein

abundance, 377-78 domain organization, 378-81

exonuclease digestion, 386-88

family of La motifcontaining proteins, 381– 84

functions, 384–94 future research, 398–99

introduction, 376-77 miscellaneous roles, 394-

mRNA translation, 391-93

nuclear retention, 388-90

oligomerization, 397-98 proteases in parasitic perspectives, 398-99 protozoa and, 278, 292-97 pre-tRNA maturation. Leishmanolysin 384 - 86RNA binding, 394-98 proteases in parasitic protozoa and, 295-97 RNA polymerase III. Lemna minor 390-91 deoxy sugars and, 731 RNA sequence Leptospira interrogans recognition, 394-97 lipopolysaccharide structural features, 378endotoxins and, 653 84 Lesion-replicating enzymes subcellular location, 377eukaryotic DNA polymerases and, 151-56 transcription factors, 390-Leucine-rich repeats lipopolysaccharide Lateral gene transfer endotoxins and, 635 lipopolysaccharide Lewis antigen endotoxins and, 635 glycoprotein synthesis Latrunculin and, 595, 600-2, 604 nuclear actin and actin-LexA protein related proteins in Y-family polymerases chromatin remodeling. and, 20-21 777 lgt mutants lemp mutants lipopolysaccharide proteases in parasitic endotoxins and, 671 Li2+ protozoa and, 293-94 Ldh gene hepatitis delta virus metabolism and circadian ribozyme catalysis and, rhythms, 322-23 901, 907 Leading strand gap Lipid A RecA and replication fork · lipopolysaccharide endotoxins and, 635-90 repair, 92-93 Lipid metabolism Y-family polymerases heparan sulfate ligand and, 22, 41 binding site assembly Learning and, 435-64 lipoprotein receptors in Lipids the nervous system and, lipoprotein receptors in 423-24 the nervous system and, neuronal Ca2+/ 405 calmodulin-dependent mammalian ABC protein kinase II and. transporters in health and 473-504 disease, 537, 567 Legionella pneumophila Lipopolysaccharide (LPS) lipopolysaccharide bacterial endotoxins and, 644 deoxy sugars and, 701-

48

Leishmania spp.

Lipopolysaccharide (LPS) endotoxins ABC transporter, 648-51 activation of innate immunity, 636-41 constitutive lipid A (endotoxin) pathway, 641 - 43as target for new antibiotics, 651-53 unusual lipid A structures, 653-54 core oligosaccharides biosynthesis, 662-65, 670 - 72deep-rough phenotype, 661-62 genetics, 662-65 inner core assembly, 665-67 LPS heterogeneity, 670 - 71outer core assembly, 668 - 69outer-membrane stability, 661-62 phase variation, 671-72 structure, 655-60 Escherichia coli, 641-48 export of LPS to cell surface, 688-89 future research, 689-90 lipid A biosynthesis, 641-48, 651-55 diversity, 651-55 export, 648-51 plant genes, 654-55 regulated pathways for covalent modification. 643 MsbA, 648-51 O-polysaccharides ABC-transporterdependent pathway,

680 - 84

biosynthesis, 674-75

initiation reactions, 675

ligation to lipid A-core acceptor, 669 seroconversion reactions, 685-88 structure, 672-74 synthase-dependent pathway, 684-87 Wzy-dependent pathway, 676-81 phospholipid export, 648-Salmonella typhimurium, 641 - 48Lipoxygenase-1 profiency of enzymes as catalysts and, 882 Liver mammalian ABC transporters in health and disease, 537, 575-77 metabolism and circadian rhythms, 313, 317-18 Localization deoxy sugars and, 715-16 DNA replication in eukaryotic cells and, 342-43, 348-49 eukaryotic Rnase P and, 182 - 84La protein and, 377-78 neuronal Ca2+/ calmodulin-dependent protein kinase II and, 473, 497-503 Long-distance electron transfer through DNA A-hopping, 5759 electric conduction through DNA, 68 excess electron transfer. 65-67 electron injection by y-radiolysis in ice, 66 electron injection through photoactivated flavins, 66-67 G-hopping, 55-58

hole transfer/hole transport through DNA bulges, 61 crossovers, 61 DNA-binding proteins, 62 - 63DNA/PNA duplexes, 62 DNA/RNA duplexes, 62 hole injection into guanine, 54-55 junctions, 61 mismatches, 58-59 oxidative stress, 63-65 proton-coupled hole transfer, 60 single strands, 61-62 triple strands, 61 introduction, 52-53 Loops RNA editing by ADARs and, 836-37 Low-density lipoprotein (LDL) receptors nervous system receptors ApoE, 424-26 ApoER2, 413, 416-17 APP, 427-28 brain development, 414-24 caveolae, 427-28 central nervous system, 424-26 cholesterol, 424-26 conclusions, 428 cytoplasmic adaptor proteins, 414-15. 417-19 evolution, 406-10 genetics, 406-14 historical aspects, 406 integrins, 417 introduction, 406 LDL receptor, 410 learning, 423-24 LR11, 414 LRP1, 410-11

LRP1b, 411-12 LRP5, 413-14, 421-22 LRP6, 413-15, 421-22 megalin, 412 MEGF7, 413 memory, 423-24 microtubule-mediated transport, 419-21 neuronal signaling, 414 - 24NMDA receptormediated neurotransmission. 423-24 perspectives, 428 physiology, 406-14 rafts, 427-28 Reelin signaling pathway, 416-17 regulation, 419-21 scaffolding proteins, 414-15 sonic hedgehog pathway, 422-23 SORLA, 414 VLDL receptor, 412-13, 416-17 Wnt signaling pathway, 421-22 Low-fidelity DNA synthesis Y-family polymerases and, 17-43 lpx mutants lipopolysaccharide

endotoxins and, 635–39, 642–43, 648, 652–55
LR11 protein lipoprotein receptors in the nervous system and, 411, 414
LRP1 proteins lipoprotein receptors in the nervous system and, 410–12
LRP5/LRP6 proteins lipoprotein receptors in lipoprotein receptors in receptors in lipoprotein receptors in lipoprotein receptors in lipoprotein receptors in

the nervous system and,

411, 413-14, 421-22

Lymphoma Y-family polymerases and, 38-40 Lymphotactin glycoprotein synthesis and, 609-10 vitamin B₁₂ and selenium enzymes, 1, 6-7 M Macrolides deoxy sugars and, 701-48 Maleimide glycoprotein synthesis and, 628-29 Mammals ABC transporters in health and disease, 537-80 nuclear actin and actinrelated proteins in chromatin remodeling, 757-77 RNA editing by ADARs and, 826-28

Mandelate racemase profiency of enzymes as catalysts and, 858, 882 Mannose

glycoprotein synthesis and, 613, 619, 627

Matchmaker concept for eastablishing a moving platform eukaryotic DNA polymerases and, 144 Matrix attachment regions

Y-family polymerases and, 37 MBD proteins

ATP-dependent nucleosome remodeling and, 257, 265

Mcm proteins
DNA replication in
eukaryotic cells and, 333,
336, 344-49, 357
Mdr2/MDR3 P-glycoprotein

mammalian ABC transporters in health and disease, 567

Measles virus RNA editing by ADARs and, 831

MECA-79 antigen glycoprotein synthesis and, 608 MeCP1 complex

ATP-dependent nucleosome remodeling and, 257

Megalin lipoprotein receptors in the nervous system and, 411-12

MEGF7 protein lipoprotein receptors in the nervous system and, 411, 413

Membrane proteins type II Na,K-ATPase and, 511– 31

Membrane targeting neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 500

Memory lipoprotein receptors in the nervous system and, 423–24

neuronal Ca²⁺/
calmodulin-dependent
protein kinase II and,
473–504

β-Mercaptoethanol Na,K-ATPase and, 519 Messenger RNA (mRNA) La protein and, 375, 391– 93

neuronal Ca²⁺/
calmodulin-dependent
protein kinase II and,
498-99

RNA editing by ADARs and, 817–43 Metabolism circadian rhythm control

and, 307–27
DNA-binding proteins
and, 62–63

heparan sulfate ligand binding site assembly and, 435–64

lipoprotein receptors in the nervous system and, 405, 426 proteases in parasitic

protozoa and, 282–90 vitamin B₁₂ and selenium enzymes, 1, 6–11

Metal-dependent decarboxylases profiency of enzymes as catalysts and, 860

Metal ion catalysis hepatitis delta virus ribozyme catalysis and, 887, 898-903

Metalloproteins great metalloclusters in enzymology and, 221–43

Metazoans heparan sulfate ligand binding site assembly and, 435-64

Methane biosynthesis vitamin B₁₂ and selenium enzymes, 1, 4, 6

Methanobacterium spp.
DNA replication in
eukaryotic cells and, 346
eukaryotic Rnase P and,
166

Methanococcus spp. vitamin B₁₂ and selenium enzymes, 1, 4, 6, 11

Methanosphaera stadtmaniae vitamin B12 and selenium enzymes, 6

Methanothermobacter thermoautotrophicus eukaryotic Rnase P and, 166, 173 Methylated nucleobases active site tightness and substrate fit in DNA replication, 193 Mg²⁺

ribozyme catalysis and, 898-902, 907, 912 Na,K-ATPase and, 520

V(D)J recombination and, 112–13, 119

Y-family polymerases and, 36

Mi-2 complex ATP-dependent nucleosome remodeling and, 249-50, 256, 262

Micromonospora echinospora deoxy sugars and, 738

Microtubule-mediated transport lipoprotein receptors in the nervous system and,

419-21
migA mutant
lipopolysaccharide

endotoxins and, 670

Migration Y-family polymerases and, 17

Minor groove hydrogen binding active site tightness and

substrate fit in DNA replication, 191–216 Mismatches

long-distance electron transfer through DNA and, 51, 58–59 Y-family polymerases and, 17

Mitochondrial replicase eukaryotic DNA polymerases and, 146– 47 Mitochondrial Rnase P (MRP) eukaryotic Rnase P and, 165-84

mle gene RNA editing by ADARs

RNA editing by ADARs and, 829

 Mn^{2+}

hepatitis delta virus ribozyme catalysis and, 898, 900

V(D)J recombination and, 111-12, 119-20 Y-family polymerases

Y-family polymerases and, 36

Moira gene nuclear actin and actinrelated proteins in chromatin remodeling, 774-75

Molecular mechanisms fast protein folding and, 796-810

Molybdenum nitrogenase great metalloclusters in enzymology and, 221, 227-33

Molybdoenzymes vitamin B₁₂ and selenium enzymes, 1, 12

Monomeric λ repressor fast protein folding and, 808

Monomer-monomer interface RecA and replication fork repair, 83

Monosaccharides deoxy sugars and, 701–48 MOP9 protein

metabolism and circadian rhythms, 309

Motor RecA and replication fork repair, 71, 86

Moving platform eukaryotic DNA polymerases and, 144 Mre11/Rad50/Nbs1 complex V(D)J recombination and, 101, 121–24

MRP proteins

mammalian ABC transporters in health and disease, 537, 557-67

msb mutants

lipopolysaccharide endotoxins and, 642-43, 648-51

MTA-1 protein ATP-dependent nucleosome remodeling and, 257

Mucin glycoprotein synthesis and, 595-611

Mucor hiemalis glycoprotein synthesis and, 616

Multimeric structure neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 473–504

Multiple independent oscillators metabolism and circadian rhythms, 312–15

Multistate folding tests fast protein folding and, 790-92

Multistep hopping long-distance electron transfer through DNA and, 53, 55–58, 67

Mutagenic lesion bypass SOS

> RecA and replication fork repair, 71, 75-76

Mutasome Y-family polymerases and, 24

Mycaminose deoxy sugars and, 728– 29, 731

Mycobacterium tuberculosis

RecA and replication fork repair, 80 Mycoplasma pulmonis RecA and replication fork repair, 80 MyD88 protein lipopolysaccharide endotoxins and, 635, 640 - 41Na+ RNA editing by ADARs and, 828 Na, K-ATPase α-subunit, 514-18, 527 B-subunit, 518-20 active transport, 520-24 assembly, 529-30 ATP hydrolysis, 520-22 conclusions, 532 delivery, 529-30 digitalis action and its site, 525-26 energy transduction, 522-24 expression systems, 524high-resolution structures, 526-29 introduction, 511-13 mutagenesis, 524-25 oligomerization, 531 P-type ATPase family, 513-14 regulation of function, 530-31 signaling, 531 Nanoelectronics long-distance electron transfer through DNA and, 51-68 Native chemical ligation glycoprotein synthesis and, 609-11, 625 Nbs1 protein V(D)J recombination and,

123, 124

S

NDP-sugars deoxy sugars and, 701, 735 - 47Negative supercoiling nuclear actin and actinrelated proteins in chromatin remodeling, 768 Neisseria spp. glycoprotein synthesis and, 604 lipopolysaccharide endotoxins and, 637, 652, 659-60, 663, 666, 668, 671-72 Neoglycopeptide glycoprotein synthesis and, 623 Nephroselmis olivacea eukaryotic Rnase P and, 172 Neural activity metabolism and circadian rhythms, 307-27 Neurons Ca2+/calmodulindependent protein kinase II and, 473-504 lipoprotein receptors in the nervous system and, 414 - 24· metabolism and circadian rhythms, 319-20 RNA editing by ADARs and, 828-29 Neurospora VS ribozymes hepatitis delta virus ribozyme catalysis and, 888, 908 Neurotransmitters lipoprotein receptors in the nervous system and, 405, 423-24 metabolism and circadian rhythms, 319-20 RNA editing by ADARs and, 817-43 Neutral endopeptidase

proteases in parasitic protozoa and, 279-80 NH, hepatitis delta virus ribozyme catalysis and, Nickel-containing carbon monoxide dehydrogenase great metalloclusters in enzymology and, 221, 235-39 Nicks V(D)J recombination and, 108-9, 113, 116, 118 Y-family polymerases and, 37, 39 NifB gene great metalloclusters in enzymology and, 243 Nitrogenase great metalloclusters in enzymology and, 221, 227-33 Nitrous oxide reductase great metalloclusters in enzymology and, 221, 239 - 40NMDA receptor lipoprotein receptors in the nervous system and, 423-24 NME1 gene eukaryotic Rnase P and, 167, 181 Noncoding RNAs RNA editing by ADARs and, 830 Noninstructional lesions active site tightness and substrate fit in DNA replication, 201-2 Non-native structure fast protein folding and, 798

Nonpolar DNA/RNA bases

active site tightness and Drosophila substrate fit in DNA replication, 194-96, 202 Nonpurine, ponpyrimidine molecular shapes active site tightness and substrate fit in DNA replication, 202-3 NPAS2:BMAL1 heterodimer metabolism and circadian rhythms, 309, 314-15, 321-27 N-terminal domains RecA and replication fork repair, 76, 80, 82 NuA4 complex ATP-dependent nucleosome remodeling and, 252-53 nuclear actin and actinrelated proteins in chromatin remodeling, 763 Nuclear actin actin-related proteins in chromatin remodeling and actin-containing chromatin remodeling complexes from mammals, yeast, flies, 757-64 background, 756-57 BAF complex, 759-60, 762, 774-77 BAP complex, 761, 774-77 Ca2+ signaling in nucleus, 772-73 displacement of nucleosomes in cis,

767

767-68

displacement of

Dnase I digestion

dirusption, 767

nucleosomes in trans.

analysis of nucleosome

melanogaster, 761. 774-77 embryonic development, 774-75 future research, 777 history, 756-57 Ino80 complex, 761, inositol phosphates, 771-72 mammals, 759-61. 763-77 negative supercoiling. 768 NuA4 complex, 763 nuclear actin-binding proteins, 773-74 nuclear regulators, 769-70, 772-74 overview, 768-69 p400 complex, 764 Rho family of small GTP-binding proteins, RSC complex, 766 Saccharomyces cerevisiae, 761, 763-SWI/SNF complex. 764 - 65SWI/SNF-related complexes, 766-68. 774-75 TIP60 complex, 763 tumor suppressor functions, '775-77 and, 817-43

Nuclear-encoded RNA RNA editing by ADARs Nuclear localization DNA replication in eukaryotic cells and,

Nuclear magnetic resonance (NMR) fast protein folding and,

348 - 49

788 - 89

hepatitis delta virus ribozyme catalysis and, 902, 906-8

Nuclear retention La protein and, 375, 388-

Nuclear Rnase P eukaryotic Rnase P and, 172 - 80

Nuclear targeting neuronal Ca2+/ calmodulin-dependent protein kinase II and, 499-500

Nucleases V(D)J recombination and, 118

Nucleation fast protein folding and,

783-811 Nucleation/condensation mechanism

fast protein folding and, 801-3 Nucleolus

eukaryotic Rnase P and, 165-84

Nucleoprotein filaments RecA and replication fork repair, 77-78, 96

Nucleoside analogs active site tightness and substrate fit in DNA replication, 193-98, 202, 212

Nucleoside triphosphate (NTP) RecA and replication fork

repair, 90 Nucleosome remodeling

ATP-dependent chromatin fluidity, 258-59 chromatin metabolism, 249-50

> conclusions, 268 introduction, 248-49

ISWI complexes, 254mechanisms, 257-62 Mi-2 complexes, 256 nucleosome sliding, 254-56, 258-60 NURD complexes, 256-57 regulatory networks, 265 - 68remodeled state, 259-Swi/Snf family, 250-54 Swiss Army knife repressors, 256-57 targeing of remodeling factors, 262-65 twisting and bulging models, 260-62 ATP-dependent:, 247 Nucleosomes nuclear actin and actinrelated proteins in chromatin remodeling, 767-68 Nucleotide analogs mammalian ABC transporters in health and disease, 564-66 Nucleotide regulation DNA replication in eukaryotic cells and, 347 - 48Nucleotide sugar metabolism heparan sulfate ligand binding site assembly and, 435-64 NURD complex ATP-dependent nucleosome remodeling and, 256-57 NURF complex ATP-dependent nucleosome remodeling

0

O-antigens

lipopolysaccharide mammalian ABC endotoxins and, 635-36, transporters in health and 651, 657, 669 disease, 577-79 Oryza sativa Okazaki fragments eukaryotic DNA La protein and, 383 Osa gene polymerases and, 144 nuclear actin and actin-Y-family polymerases related proteins in and, 23, 42 chromatin remodeling. Oligomerization 774-75 La protein and, 397-98 Outer membrane stability Na, K-ATPase and, 531 lipopolysaccharide Oligopeptidase B endotoxins and, 661-62 proteases in parasitic Oxaloacetate decarboxylase protozoa and, 280-81 profiency of enzymes as Oligosaccharides catalysts and, 860 biologically-active Oxidation heparan sulfate ligand deoxy sugars and, 717-19 binding site assembly Oxidative stress and, 439-44 long-distance electron glycoprotein synthesis transfer through DNA and, 593-630 and, 51-68 lipopolysaccharide Oxidoreductases endotoxins and, 655-72 deoxy sugars and, 707-11 One-carbon branched chain Oxygen attachment deoxy sugars and, 707-16, deoxy sugars and, 733-34 720-22, 725, 728 Open-and-shut joint hepatitis delta virus V(D)J recombination and, ribozyme catalysis and, 109 894-95, 898-900, 903, O-polysaccharides 905-8, 912 lipopolysaccharide . endotoxins and, 672-88 Optimal specificity p76/p68 proteases RNA editing by ADARs proteases in parasitic and, 837-38 protozoa and, 279 Origin recognition complex p400 complex (ORC) nuclear actin and actin-DNA replication in related proteins in eukaryotic cells and, 333, chromatin remodeling. 335-41, 352-53 764 Orotidine 5'-phosphate Paracoccus denitrificans decarboxylase (OMP) great metalloclusters in decarboxylase enzymology and, 239 and, 254-55, 267 profiency of enzymes as para gene

catalysts and, 847-49,

855-58, 861-82

Orphan nuclear receptors

RNA editing by ADARs

and, 829

Parallel pathways test

fast protein folding and, 796

Parasites

protozoan

proteases in, 275-99

Parasitophorous vacuole mambrane-enclosed merozoite structures (PEMS)

proteases in parasitic protozoa and, 299

Patches of accessible DNA ATP-dependent nucleosome remodeling and, 247

Pathogenicity lipopolysaccharide endotoxins and, 635–90 proteases in parasitic protozoa and, 275–99

Patterning

heparan sulfate ligand binding site assembly and, 459-63

Pb2+

hepatitis delta virus ribozyme catalysis and, 895, 900

PBAF complex ATP-dependent nucleosome remodeling and, 252–53

Peptide nucleic acid (PNA) long-distance electron transfer through DNA and, 62

Per genes

metabolism and circadian rhythms, 309-14, 323-. 24, 326

PfSUP-1/PfSUP-2 proteases proteases in parasitic protozoa and, 278-79

P-glycoproteins mammalian ABC transporters in health and disease, 537, 547–55, 567 Phase response curves metabolism and circadian rhythms, 325–27

Phase variation

lipopolysaccharide endotoxins and, 671-72

PHD fingers

ATP-dependent nucleosome remodeling and, 256

Phenotypic analysis lipopolysaccharide endotoxins and, 661–62 RNA editing by ADARs and, 825–26

φ-value analysis
fast protein folding and,

783, 794–96 PHO promoters

> ATP-dependent nucleosome remodeling and, 251–52, 258, 267

Phosphate

hepatitis delta virus ribozyme catalysis and, 894–95, 899–900, 903, 905–8

Phosphodiester bond cleavage

hepatitis delta virus ribozyme catalysis and, 887-913

Phosphodiesterases profiency of enzymes as catalysts and, 855

Phosphoinositol glycans glycoprotein synthesis and, 627–28

Phospholipids

lipopolysaccharide endotoxins and, 648-51

Phosphomonoesterases profiency of enzymes as catalysts and, 855

Phosphorylation neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 473, 486

Phosphotriesterase profiency of enzymes as catalysts and, 882

Photoactivated flavins long-distance electron transfer through DNA and, 66-67

Plants

lipopolysaccharide endotoxins and, 635, 654-55

Plasma membrane lipopolysaccharide endotoxins and, 635–90

Plasmepsins

proteases in parasitic protozoa and, 282-84

Plasmodium spp. proteases in parasitic protozoa and, 276–80, 282–86, 298–99

pmr mutants

lipopolysaccharide endotoxins and, 646-48, 661

P nucleotide insertions V(D)J recombination and, 108, 118

pol mutants

Y-family polymerases and, 21, 43

Polarons

 long-distance electron transfer through DNA and, 58

POLM gene Y-family polymerases and, 36, 39

Polyani's formalism profiency of enzymes as catalysts and, 851-52

Polycomb gene nuclear actin and actinrelated proteins in chromatin remodeling, 774 Polymer formation heparan sulfate ligand binding site assembly and, 435-64 Polymyxin lipopolysaccharide endotoxins and, 644, 646 - 48Polyoma virus RNA editing by ADARs and, 833 Polysaccharides heparan sulfate ligand binding site assembly and, 435-64 POP genes eukaryotic Rnase P and, 167, 173-74, 178, 180-Porphyra spp. eukaryotic Rnase P and, 172 Postsynaptic density neuronal Ca2+/ calmodulin-dependent protein kinase II and, 500 - 3Posttranslational modification glycoprotein synthesis and, 593, 628 Precursor tRNA (p-tRNA) eukaryotic Rnase P and, La protein and, 375, 384-Pre-replicative complex DNA replication in eukaryotic cells and, 333, 335-56 PriA protein Y-family polymerases and, 28-29 Prokaryotes error-prone repair DNA polymerases and, 17-32 vitamin B₁₂ and selenium enzymes, 1, 10

ıd.

Y-family polymerases and, 41-43 Proliferating cell nuclear antigen (PCNA) eukaryotic DNA polymerases and, 145-46 Y-family polymerases and, 34, 41, 43 Promiscuous substrate specificity deoxy sugars and, 701, Proteases cell-surface lipoprotein receptors in the nervous system and, 405 in parasitic protozoa CAP5.5, 290 cruzain, 286-89 Cryptosporidium, 281 cystein proteases, 293cytoadherence, 290-91 Entamoeba, 290-92 excystation, 281-82 facilysin, 285-86 falcipain, 284-85 future research, 299 Giardia, 282 host cell invasion, 277-81 introduction, 276-77 Leishmania, 292-97 leishmanolysin, 295-97 metabolism, 282-90 neutral endopeptidase, 279 - 80oligopeptidase B, 280-81 p76/p68, 279 PfSUB-1, 278-79 PfSUB-2, 278-79 plasmepsins, 282-84 Plasmodium, 277-80, 282-86, 298-99 proteasome, 289-90 Tc80, 281

Trichomonas, 291, 297 Trypanosoma, 280-81. 286 - 90virulence factors, 291-97 Proteasomes proteases in parasitic protozoa and, 289-90 Protein folding fast, 783-811 Protein kinases DNA replication in eukaryotic cells and, 333, 350-53, 361-65 neuronal Ca2+/ calmodulin-dependent protein kinase II and, 473-504 Protein L/Protein G fast protein folding and, 807 Proteoglycans heparan sulfate ligand binding site assembly and, 435-64 Proton-coupled hole transfer long-distance electron transfer through DNA and, 60

and, 60
Proton donor/acceptor
hepatitis delta virus
ribozyme catalysis and,
887, 891–92, 894–95,
900–2, 904–8, 912–13
Protozoa

parasitic proteases in, 275–99 P-selectin glycoprotein synthesis and, 604 Pseudoknots hepatitis delta virus ribozyme catalysis and,

Pseudomonas aeruginosa deoxy sugars and, 736 lipopolysaccharide endotoxins and, 642, 645, 652–54, 658–59, 661–63, 666–67, 670, 673, 675, 679, 682, 685, 687

Pseudomonas nautica great metalloclusters in enzymology and, 239

P-type ATPase superfamily Na,K-ATPase and, 511-31

Pvu II

long-distance electron transfer through DNA and, 62-63

pyrE mutant lipopolysaccharide endotoxins and, 663

Pyridoxamine 5'-phosphate deoxy sugars and, 712-14

Pyrobaculum aerophilum DNA replication in eukaryotic cells and, 343

Pyrococcus spp. eukaryotic Rnase P and, 166

R

Radiation damage V(D)J recombination and, 101

Radical intermediates deoxy sugars and, 715–16 rad mutants

eukaryotic DNA polymerases and, 144, 154

Y-family polymerases and, 32–34

RecA and replication fork repair, 74, 76, 78–79, 85–86, 90

Rafts

lipoprotein receptors in the nervous system and, 427-28

RAG1/RAG2 proteins V(D)J recombination and, 102-27

Rapid kinetics

fast protein folding and, 783-811

Rate enhancement profiency of enzymes as catalysts and, 847, 854-

57

Rb tumor suppressor protein nuclear actin and actinrelated proteins in chromatin remodeling, 755–77

RecA protein

recombinational DNA
repair of stalled
replication forks and
ATPase, 79–80
ATP binding site, 83–
84

ATP hydrolysis, 85–91 carboxyl terminal domain, 84–85

DNA binding, 76–77, 84

DNA pairing, 78–79 DNA strand exchange reactions, 78 3' end invasion, 92 5' end invasion, 92

facilitated DNA rotation model, 88-91 fork regression with

lagging strand gap,

fork regression with leading strand gap, 92-93

introduction, 72–76 molecular function, 85– 96

monomer-monomer interface, 83 nucleoprotein filaments, 77–78, 96

protein activities, 76-80

protein structure, 80-85

RecA filament blockage of replication initiation, 96

RecA motor, 86 RecA redistribution

model, 86–88 sequence alignments, 80

topology-driven progression of a regressed replication

fork, 94–96 X-ray crystallography, 80–82

Y-family polymerases and, 20-29

Receptors

lipopolysaccharide endotoxins and, 635–36, 639–41, 653

lipoprotein receptors in the nervous system and, 405-28

mammalian ABC transporters in health and disease, 577-79

RNA editing by ADARs and, 826-28

Recombinant technology glycoprotein synthesis and, 615

Recombinational DNA repair RecA and replication fork repair, 71–96

Recombination signal sequences

V(D)J recombination and, 102-27

Redistribution model RecA and replication fork repair, 86-88

Redox mechanism deoxy sugars and, 714– 16, 715, 717 great metalloclusters in enzymology and, 222–25 vitamin B₁₂ and selenium enzymes, 1, 13

Reelin

lipoprotein receptors in the nervous system and, 405, 416-17

Regulation

DNA replication in eukaryotic cells and, 350-56 eukaryotic DNA polymerases and, 147 lipopolysaccharide endotoxins and, 643-46 lipoprotein receptors in the nervous system and, 419-21 mammalian ABC

mammalian ABC transporters in health and disease, 577-79 Na,K-ATPase and, 530-

neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 473, 486

nuclear actin and actinrelated proteins in chromatin remodeling, 769-70, 772-74

Regulatory

autophosphorylation neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 486-96

Regulatory networks ATP-dependent nucleosome remodeling and, 265–68

Remodeling

ATP-dependent nucleosome remodeling and, 247–68 nuclear actin and actinrelated proteins in chromatin remodeling, 75–77

Repair factors V(D)J recombination and, 102-27 Replicases eukaryotic DNA polymerases and, 146– 47

Replication hepatitis delta virus ribozyme catalysis and, 890-91

Replication factor C (RF-C) eukaryotic DNA polymerases and, 144– 46

Replication-repair "factories" Y-family polymerases and, 17, 41-43

Replisome

Y-family polymerases and, 24

Re-replication DNA replication in eukaryotic cells and, 350-54

Restricted feeding metabolism and circadian rhythms, 307-27

Retinoblastoma tumor suppressor protein nuclear actin and actinrelated proteins in chromatin remodeling, 755, 775–77

Rev1 protein
DNA polymerases and,
151–53, 155
eukaryotic DNA
polymerases and, 133
Y-family polymerases
and, 30, 32–33

rfa mutant lipopolysaccharide endotoxins and, 662, 671 rfb mutants

lipopolysaccharide endotoxins and, 674

R-form DNA RecA and replication fork repair, 79 RGYW hot spots Y-family polymerases and, 31, 37–39 Rhizobium etli

lipopolysaccharide endotoxins and, 644-45, 653-54

Rhodospirillum rubrum great metalloclusters in enzymology and, 236-37

Rho family of small GTPbinding proteins nuclear actin and actinrelated proteins in chromatin remodeling, 769-71

Ribonuclease P (Rnase P) eukaryotic activities, 170-80 bacteria, 168 chloroplast Rnase P. 172 coordinated RNA pathways, 182-84 eukarvotes, 168 functions, 168 introduction, 166-70 mitochondrial Rnase P. 171, 180-82 nuclear holoenzyme architecture, 179-80 nuclear Rnase P, 172-80 precursor tRNA cleavage reaction

mechanism, 169–70 precursor tRNA substrate recognition, 168–69 ribozyme activity of

Rnase P RNA, 166 subnuclear localization, 182–84 subunit composition,

167 summary, 184 La protein and, 385

Ribonuclease T2

profiency of enzymes as catalysts and, 882 Ribonucleoproteins eukaryotic Rnase P and,

Ribose

165-84

hepatitis delta virus ribozyme catalysis and, 895

Ribosomal RNA (rRNA) processing

eukaryotic Rnase P and, 165-84

Ribozymes

eukaryotic Rnase P and, 165-84

hepatitis delta virus catalysis and, 887-913

RNA backbone hepatitis delta virus ribozyme catalysis and

ribozyme catalysis and, 887-913 RNA binding

La protein and, 375, 394– 98

RNA editing by adenosine deaminases

> (ADARs) ADARs, 819-43 ADATs, 821-22, 838, 840

that act on RNA

base-flipping, 840-41 binding in register, 837 catalysis, 838-41

definition of RNA editing, 818 dimerization, 840

Drosophila sodium channel RNAs, 828 enzyme family, 819–22 evolution model, 842

extended family members, 821–22 future research, 841–43

glutamate receptor

RNAs, 826-27

hepatitis delta virus, 831-33

internal loops, 836-37 introduction, 818-19 in vivo action, 822-

833, 841-43 measles virus, 831

neuronal substrates, 828–29

828-29

noncoding RNAs, 830 optimal specificity, 837-38

overview, 818, 834-35,

perspectives, 841-43 phenotype of knockout

animals, 825–26 polyoma virus and retention of inosine-

containing RNAs in nucleus, 833 preferences, 835–36

relationship of ADARs to other processes involving dsRNA, 841 RNA splicing, 829

selectivity, 836–38 serotonin receptor

RNAs, 827-28 specificity of ADARs, 834-36

splice site, 829 stopping reaction, 836– 37

structures of ADAR substrates, 833–38

5' UTRs, 830 viruses, 830–33 zinc, 838–40

RNA nucleobases

hepatitis delta virus ribozyme catalysis and, 903-9

RNA polymerase III La protein and, 375, 390-91

RNA-protein complexes La protein and, 375 RNA sequence recognition La protein and, 394–97 RNA splicing

RNA editing by ADARs and, 829

RPM2 gene

eukaryotic Rnase P and, 171

RPP genes

eukaryotic Rnase P and, 173, 167, 182-83

RPR genes

eukaryotic Rnase P and, 167, 173-83

RSC complex

ATP-dependent nucleosome remodeling and, 252, 259 nuclear actin and actin-

related proteins in chromatin remodeling, 766

S

Saccharomyces cerevisiae DNA replication in eukaryotic cells and, 334-35, 337, 339-41,

343-45, 348, 350-55, 358-62, 364-67 eukaryotic DNA

polymerases and, 138–39, 140–51, 155–56, 157 eukaryotic Rnase P and, ,167–68, 171, 173–76,

178, 180, 182 glycoprotein synthesis

and, 626 La protein and, 377–86,

388, 390–91, 394, 396 lipopolysaccharide

endotoxins and, 678 lipoprotein receptors in the nervous system and,

nuclear actin and actinrelated proteins in chromatin remodeling,

758, 761, 763-66, 772, 774 profiency of enzymes as catalysts and, 861, 866 proteases in parasitic protozoa and, 288 RecA and replication fork repair, 76 RNA editing by ADARs and, 839 V(D)J recombination and. 122 Y-family polymerases and, 18-19, 32, 41 Saccharopolyspora erythraea deoxy sugars and, 739 SAGA complex ATP-dependent nucleosome remodeling and, 266 deoxy sugars and, 709,

Salmonella spp. deoxy sugars and, 709, 716–17, 735 lipopolysaccharide endotoxins and, 641–48, 653–57, 659, 661–63, 665, 667–68, 670–71, 673–76, 679, 684–88 Sbc proteins

V(D)J recombination and, 124 Scaffolds

glycoprotein synthesis and, 597, 605, 621 lipopolysaccharide endotoxins and, 688 lipoprotein receptors in the nervous system and, 414, 415 Schiff base

enzymes, 10–11 Schizosaccharomyces pombe DNA replication in eukaryotic cells and, 337, 339, 344–46, 348, 351, 354, 357, 359–60, 362–

63, 366-67

vitamin B₁₂ and selenium

eukaryotic DNA
polymerases and, 138–
39, 140, 144–49, 154
La protein and, 379–82,
384, 386, 390–91
Y-family polymerases
and, 41
Sciara coprophila
DNA replication in
eukaryotic cells and, 337
scid mutations

121 scrambler mutant lipoprotein receptors in the nervous system and, 416

V(D)J recombination and.

Second-order rate constant profiency of enzymes as catalysts and, 847–81 selD gene vitamin B12 and selenium

enzymes, 12 Selectins glycoprotein synthesis

and, 604
Selectivity
active site tightness and
substrate fit in DNA
replication, 211-12
RNA editing by ADARs

and, 836–38

Selenocysteine
vitamin B₁₂ and selenium
enzymes, 1

Seleno-tRNAs
 vitamin B₁₂ and selenium
 enzymes, 1, 10, 12
 Self-cleaving RNA

sequences hepatitis delta virus ribozyme catalysis and, 887-913

SERCA Ca-ATPase Na,K-ATPase and, 512– 18, 520–21, 523–24, 526–29, 532 Seroconversion reactions lipopolysaccharide endotoxins and, 685–88 Serotonin

receptor RNAs RNA editing by ADARs and, 827–28

sft mutant heparan sulfate ligand binding site assembly and, 462

Shigella spp. lipopolysaccharide endotoxins and, 665, 673, 679, 685, 687 RecA and replication fork repair, 80

"Shutter speeds" fast protein folding and, 788

Sialyl TF antigens glycoprotein synthesis and, 608

Side chains deoxy sugars and, 701–48 fast protein folding and, 794–96

Signal jointsth V(D)J recombination and, 106-7, 115, 121-22

Signal transduction heparan sulfate ligand binding site assembly and, 435–64 lipopolysaccharide endotoxins and, 635 lipoprotein receptors in the nervous system and, 405–28 Na,K-ATPase and, 531

neuronal Ca²⁺/
calmodulin-dependent protein kinase II and, 473–504

nuclear actin and actinrelated proteins in chromatin remodeling, 772-73

Simian virus 40 (SV40)

Y-family polymerases and, 43 Single-strands long-distance electron transfer through DNA and, 51, 61 Size-altered DNA bases active site tightness and substrate fit in DNA replication, 195-97 Size exclusion active site tightness and substrate fit in DNA replication, 207-8 Skin cancer eukarvotic DNA polymerases and, 153 Y-family polymerases and, 17, 20, 31, 33 Sld proteins DNA replication in eukaryotic cells and, 358 - 61

Sliding histone octamer ATP-dependent nucleosome remodeling and, 247, 254-56, 258-61 Sloppier copier DNA

polymerases in prokaryotes and eukaryotes, 17-43 Small RNAs La protein and, 375-99

SMD1 gene La protein and, 388

SNM1 gene eukaryotic Rnase P and, 167, 181

Sodium methoxide glycoprotein synthesis and, 597

Sodium pump Na, K-ATPase and, 511-31 Solid-phase peptide synthesis (SPPS)

glycoprotein synthesis and, 597-99, 602, 605, 609, 611, 618-21

Solvation active site tightness and substrate fit in DNA replication, 191, 208-9

Solvent accessibility fast protein folding and, 792-94

Somatic hypermutation Y-family polymerases and, 17, 30-31, 36-40

Sonic hedgehog pathway lipoprotein receptors in the nervous system and, 422-23

SORLA protein lipoprotein receptors in the nervous system and, 411, 414

SOS mutagenesis RecA and replication fork repair, 71, 75-76 Y-family polymerases

and, 17, 20-32 SpCDT1 gene DNA replication in eukaryotic cells and, 344

Specificity heparan sulfate ligand binding site assembly and, 435-64 lipopolysaccharide endotoxins and, 635

proteases in parasitic protozoa and, 275-99 RNA editing by ADARs and, 817, 834-36

Sphingomonas paucimobilis lipopolysaccharide endotoxins and, 652

Spirochetes lipopolysaccharide endotoxins and, 637 Spliceosomes

La protein and, 386-87 Splice site creation

RNA editing by ADARs and, 829

sav mutants heparan sulfate ligand binding site assembly and, 448, 461-62 Sr2+

hepatitis delta virus ribozyme catalysis and, 898

Stadtman TC, 1-15 Stalled replication forks RecA and replication fork repair, 71-96

Staphylococcal nuclease profiency of enzymes as catalysts and, 882

Staphylococcus aureus deoxy sugars and, 742 State viariables rapid perturbation of

fast protein folding and, 787

Stem-loop structures hepatitis delta virus ribozyme catalysis and,

Sterics active site tightness and substrate fit in DNA replication, 191-216

Streptococcus spp. deoxy sugars and, 720, 723-24, 728, 730-31, 733, 736-41, 746 lipopolysaccharide endotoxins and, 684 mammalian ABC transporters in health and disease, 559 RecA and replication fork

repair, 81 Structural/topological determinants fast protein folding and, 796-97

Subnuclear localization

eukaryotic Rnase P and, 182-84

Substrate binding affinity profiency of enzymes as catalysts and, 850-51, 852-54

Substrate fit active site tightness and in DNA replication, 191–216

Substrate recognition precursor tRNA eukaryotic Rnase P and, 168

Substrate specificity deoxy sugars and, 701, 735

mammalian ABC transporters in health and disease, 558-59

Sugars

sterically-augmented active site tightness and substrate fit in DNA replication, 197–98 unusual, 701–48

Sulfation

heparan sulfate ligand binding site assembly and, 435, 451-56

Sulfolobus solfataricus RecA and replication fork repair, 76

Sulfonamide "safety-catch" resin glycoprotein synthesis

and, 611 Sulfotransferases

repair, 95

heparan sulfate ligand binding site assembly and, 435-64

Supercoiling
nuclear actin and actinrelated proteins in
chromatin remodeling,
768
RecA and replication fork

Superhelical torsion ATP-dependent nucleosome remodeling and, 261

Superoxide dismutase profiency of enzymes as catalysts and, 882

Suprachiasmatic nucleus metabolism and circadian rhythms, 307, 310–16, 318–19, 326

Supramolecular assemblies neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 482-83

Sweet potato β-amylase profiency of enzymes as catalysts and, 858

Swi/Snf family ATP-dependent nucleosome remodeling and, 249-54, 258-59, 262-64, 266-67

nuclear actin and actinrelated proteins in chromatin remodeling, 755, 758–59, 764–68, 774–75

Swiss Army knife repressors

ATP-dependent

nucleosome remodeling
and, 256-57

syndecan-3 mutant heparan sulfate ligand binding site assembly and, 461

Synthases lipopolysaccharide endotoxins and, 684-87

T

T4 bacteriophage RecA and replication fork repair, 74–76 Targeting ATP-dependent nucleosome remodeling and, 262-65

DNA replication in eukaryotic cells and, 362-64

lipopolysaccharide endotoxins and, 651-53 neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 497-503

Y-family polymerases and, 17

TATA-binding protein (TBP) long-distance electron

transfer through DNA and, 62–63

TbCALP1 protein proteases in parasitic protozoa and, 290

TBP protein ATP-dependent nucleosome remodeling and, 256

Tc80 protease proteases in parasitic protozoa and, 281

Tcellr T-cell receptor V(D)J recombination and, 102-27

Telomere maintenance eukaryotic DNA polymerases and, 149

Tenascin heparan sulfate ligand binding site assembly and, 442

Terminal deoxynucleotidyl transferase (TdT) eukaryotic DNA polymerases and, 156–57 3'-Termini

small RNA La protein and, 375–99 tert-butyloxycarbonyl

tert-butyloxycarbonyl (BOC)-based chemistry

glycoprotein synthesis and, 597, 609

Tetrahymena thermophila eukaryotic Rnase P and, 179

hepatitis delta virus ribozyme catalysis and, 888, 890, 900, 909-10, 912-13

Th286 autophosphorylation neuronal Ca²⁺/ calmodulin-dependent protein kinase II and, 487-90

Thermococcus spp. eukaryotic Rnase P and, 166

Thermotoga maritima lipopolysaccharide endotoxins and, 637, 652

Thiobacillus ferroxidans lipopolysaccharide endotoxins and, 654

3-ThioGalNAc glycoprotein synthesis and, 606, 608

Thioredoxin reductase vitamin B₁₂ and selenium enzymes, 1, 13

Thiosemicarbazide glycoprotein synthesis and, 623

Thrombospondin heparan sulfate ligand binding site assembly and, 442

tim mutant metabolism and circadian rhythms, 324

TIP60 complex nuclear actin and actinrelated proteins in chromatin remodeling, 763

TLR4 protein lipopolysaccharide endotoxins and, 635–36, 639–41, 653 tolA mutants lipopolysaccharide endotoxins and, 689

Topology heparan sulfate ligand

binding site assembly and, 456-57

RecA and replication fork repair, 94-96

Torsional stress

RecA and replication fork repair, 87, 90, 95

Trafficking

Y-family polymerases and, 17

trans-acting HDV ribozyme hepatitis delta virus ribozyme catalysis and, 896-99, 902, 910-12

Transamination deoxy sugars and, 728– 29, 731

Transcription-associated factors (TAFs) Y-family polymerases and, 37

Transcription factors
La protein and, 375, 390–
91

long-distance electron transfer through DNA and, 62-63

trans-displacement

ATP-dependent nucleosome remodeling and, 258-61 nuclear actin and actinrelated proteins in chromatin remodeling, 767-68

Transfer RNA (tRNA) eukaryotic Rnase P and, 165–84 La protein and, 375, 384–

86 RNA editing by ADARs and, 821–22, 838, 840 seleno-tRNA vitamin B₁₂ and selenium enzymes, 1, 10, 12

Transient methods fast protein folding and, 785-87

Transition state model fast protein folding and, 792–96 profiency of enzymes as catalysts and, 847, 850– 54, 857–59

Translation
La protein and, 375, 391-

Translesion synthesis eukaryotic DNA polymerases and, 133–58 Y-family polymerases and, 21–31, 34, 40

Translocation
neuronal Ca²⁺/
calmodulin-dependent
protein kinase II and,
501-3

Transport
lipopolysaccharide
endotoxins and, 648-51,
680-84
long-distance electron
transfer through DNA

and, 51–68 mammalian ABC transporters in health and disease, 537–80 Na,K-ATPase and, 511,

Transposons V(D)J recombination and, 115-16

520-24

Transversion long-distance electron transfer through DNA and, 64

Trapping neuronal Ca²⁺/ calmodulin-dependent

protein kinase II and. 491-92 Treponema pallidum lipopolysaccharide endotoxins and, 652-53 Trf4 protein Y-family polymerases and, 35 Trichomonas vaginalis proteases in parasitic protozoa and, 291, 297 Triosephosphate isomerase profiency of enzymes as catalysts and, 882 Triphosphate recognition active site tightness and substrate fit in DNA replication, 214 **Triplexes** long-distance electron transfer through DNA and, 51 RecA and replication fork repair, 79

transfer through DNA and, 61 trithorax genes ATP-dependent nucleosome remodeling and, 254

long-distance electron

Triple strands

Tritrichomonas foetus proteases in parasitic protozoa and, 297

Trypanosoma spp. La protein and, 379-83 proteases in parasitic protozoa and, 278, 280-81, 286-90

ttv mutant

heparan sulfate ligand binding site assembly and, 462

Tumor-associated antigens glycoprotein synthesis and, 600-1, 608 Tumor suppressor complex nuclear actin and actinrelated proteins in chromatin remodeling. 755-77

Turnover number profiency of enzymes as catalysts and, 848 "Twisting" models ATP-dependent nucleosome remodeling and, 260-62

Two-carbon branched chain attachment deoxy sugars and, 731-33 Two-state folding tests

fast protein folding and, 790-92 Tyl proteins

deoxy sugars and, 720-22, 728-29, 731, 733-34

H

U1A protein recognition stem-loop sequence hepatitis delta virus ribozyme catalysis and, 893

umu mutants RecA and replication fork repair, 75 Y-family polymerases and, 21, 23-24, 43

Unpaired electron spin deoxy sugars and, 715-16 . Untargeted mutations Y-family polymerases and, 31-32

Unusual sugars firmation of, 701-48 Uronic acid

heparan sulfate ligand binding site assembly and, 453-54

Ust74C gene heparan sulfate ligand binding site assembly and, 461 3'UTRs/5' UTRS

RNA editing by ADARs and, 830, 843 UV-induced mutagenesis Y-family polymerases and, 17, 29-30, 33 UvsX protein RecA and replication fork repair, 74, 76

V(D)J recombination antigen receptor gene construction, 103 chromosomal translocations, 117-18 coding joints, 106-7 control, 124-27 coupled cleavage, 112-13 DNA binding, 118-19 DNA cleavage, 111-12 DNA transposition, 114-16 evolutionary implications, 116 - 17general properties, 103-8 hairpin opening, 118 introduction, 102-3 later stages, 121-24 mutational studies, 119-21 nuclease activities, 118 processing of transposition intermediates, 117 RAG1/RAG2 proteins, 110 - 21recombination intermediates in cells, recombination sites, 103regulation of site accessibility, 125-27 RSS recognition, 113 sequence motifs, 119-21 signal joints, 106-7 unusual types, 107-8

Very-conserved active site

eukaryotic DNA polymerases and, 136-40

Vibrio cholerae lipopolysaccharide endotoxins and, 663, 666, 673, 684

Viral RNA RNA editing by ADARs and, 817-43

Virulence factors proteases in parasitic protozoa and, 275, 291-Viruses

RNA editing by ADARs and, 830-33

Vitamin B₁₂ enzymes history of research, 1-15 Vitamins

lipoprotein receptors in the nervous system and, 405 Vitronectin

heparan sulfate ligand binding site assembly and, 442

VLDL receptor lipoprotein receptors in the nervous system and, 411-13, 416-17

V-regions Y-family polymerases and, 36-39

W

waa mutants lipopolysaccharide endotoxins and, 642, 660-65, 667-70, 679

Walker box lipopolysaccharide endotoxins and, 683

Water-trapping reactions long-distance electron transfer through DNA and, 53, 56-57, 59, 61-63

Watson-Crick hydrogen bonds active site tightness and substrate fit in DNA replication, 191-216

William-Beuren syndrome ATP-dependent nucleosome remodeling and, 255

Wnt proteins

lipoprotein receptors in the nervous system and, 421-22

Wobble pairs hepatitis delta virus ribozyme catalysis and, 894 Wortmannin

V(D)J recombination and. 123

Wzy protein lipopolysaccharide endotoxins and, 676-81 wzz genes

lipopolysaccharide endotoxins and, 679-81

X

Xenopus laevis ATP-dependent nucleosome remodeling and, 255-56 DNA replication in eukarvotic cells and. 335-36, 339, 341, 344-45, 347-48, 350-51, 353-67 eukaryotic DNA polymerases and, 141, 147 La protein and, 377, 379,

384, 389-91, 393-94 Na,K-ATPase and, 522, 525, 530 nuclear actin and actin-

related proteins in chromatin remodeling. 756, 768

RNA editing by ADARs and, 818, 820, 823, 829, 835 V(D)J recombination and,

110 Xenotoxins

> mammalian ABC transporters in health and disease, 549-52

XPV gene

eukaryotic DNA polymerases and, 153-54 Y-family polymerases and, 20, 33, 38, 40

X-ray crystallography deoxy sugars and, 735-36 hepatitis delta virus ribozyme catalysis and, 887, 891-96, 899, 902, 904, 906, 908 Na,K-ATPase and, 526profiency of enzymes as

catalysts and, 847-81 RecA and replication fork repair, 80-84 V(D)J recombination and, Y-family polymerases

and, 20 Xrcc4 protein

V(D)J recombination and, 101, 121-23

Y

Yeast ATP-dependent nucleosome remodeling and, 249-52, 258-59, 262-64, 266-67 nuclear actin and actinrelated proteins in chromatin remodeling, 757-64 profiency of enzymes as catalysts and, 847-81

Yeast glyoxalase I

profiency of enzymes as catalysts and, 849 YerE protein deoxy sugars and, 731-33 Yersinia spp. deoxy sugars and, 709-11, 717, 731-32 lipopolysaccharide endotoxins and, 644, 674-75, 682 Y-family polymerases adaptive mutations, 31-32 cowcatcher model, 25, 28 DNA repair factory, 41-43 E. coli, 20-32 error-free replication restart, 28-29 eukaryotic, 32-36

future research, 40-43

introduction, 18-20

pol II, 28-31

pol IV, 29-31

pol V, 24, 26-28

pol n, 33-34, 38-39 pol 4, 34 pol κ, 34-35 pol A, 36 pol µ, 35-36 pol ξ, 32-33 Rev1, 32-33 somatic a-t mutator, 38somatic g-c mutator, 39somatic hypermutation, 36 - 40SOS response, 20-32 translesion synthesis, 24, 26 - 31Trf4 protein, 35 untargeted mutations, 31-32 yolkless mutant lipoprotein receptors in the nervous system and, 407 yotari mutant

lipoprotein receptors in the nervous system and, 416

Z
Z-DNA
ATP-dependent nucleosome remodeling and, 262

Zeste protein
ATP-dependent
nucleosome remodeling
and, 254, 264
Zn²⁺
hepatitis delta virus
ribozyme catalysis and,
900
RNA editing by ADARs
and, 838, 839, 840
Zw gene
metabolism and circadian
rhythms, 323–24

